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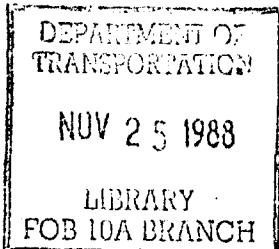


U.S. Department
of Transportation
Federal Aviation
Administration

FAA Statistical Handbook of Aviation

Calendar Year 1987

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FAA Statistical Handbook of Aviation

Calendar Year 1987

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FAA Statistical Handbook of Aviation is a convenient source for historical data. It presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, Aircraft Accidents, Aeronautical Production & Import/Export.

Reporting period:	Calendar Year
Latest edition:	1987 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1988 information will be available:	Various
Date next publication is scheduled:	November 1989 (1988 data)
Person to contact:	Patricia Beardsley

U.S. Civil Airmen Statistics is an annual study of detailed airmen statistics. It contains calendar year statistics on pilot and nonpilots and the number of certificates issued.

Reporting period:	Calendar Year
Latest edition:	1987
Order from:	Management Standards & Statistics Division or National Technical Information Service
Date 1988 information is available:	February 1989
Date next publication is scheduled:	March 1989 (1988 data)
Person to contact:	Patricia Carter

Census of U.S. Civil Aircraft is an annual publication that includes statistical data on the registered civil fleet, air carrier aircraft, and general aviation aircraft--both registered and active, detailed reports for general aviation aircraft by owner's state and county, and registered aircraft by make and model.

Reporting period:	Calendar Year
Latest edition:	1987 data
Order from:	U.S. Government Printing Office, or National Technical Information Service
Date 1988 Information will be available:	May 1989
Date next publication is scheduled:	August 1989 (1988 data)
Person to contact:	Patricia Beardsley

FAA Air Traffic Activity furnishes terminal and en route air traffic activity information (e.g., takeoffs & landings, flight plans filed) of the National Airspace System. The data is collected/compiled from the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, Flight Service Stations, Approach Control Facilities, and FAA Contract-towered airports.

Reporting period:	Fiscal Year
Latest edition:	1987 data
Order from:	U.S. Government Printing Office or National Technical Information Service
Date 1988 information will be available:	April 1989
Date next publication is scheduled:	May 1989 (1988 data)
Person to contact:	Nancy Trembley

General Aviation Activity and Avionics Survey publication presents the results of the general aviation activity and avionics survey conducted to obtain information on the activity and avionics of the U.S. registered general aviation aircraft fleet. The survey reveals estimated flying time of the active general aviation aircraft, and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Estimates are included on fuel consumption, lifetime airframe hours, avionics, and engine hours.

Reporting period:	Calendar Year
Latest edition:	1986 data
Order from:	Government Printing Office or National Technical Information Service

Date 1987 Information
will be available: November 1988

Date next publication
is available: December 1988 (1987 data)

Person to contact: Shung-Chai Huang

FAA Directory is published twice a year, it contains six sections of data: Washington/Region/Center headquarters' managers; field facilities' managers/supervisors; regional area maps/organizational charts; alphabetical listing; special interest groups; and glossary.

Latest edition: April 1988
Order from: U.S. Government Printing Office

Date next publication
is scheduled: November 1988

Person to contact: Nancy Trembley

Airport Activity Statistics of Certificated Route Air Carriers is a joint publication of the Federal Aviation Administration (FAA) and the Research & Special Programs Administration (RSPA). RSPA furnishes airport activity data on certificated route air carriers; FAA organizes/publishes it. Included in the data are passenger enplanements, tons of enplaned freight, express and mail. Both scheduled/nonscheduled service and domestic/international operations shown by airport and carrier are also included. Breakdown of data includes departures/enplanements/cargo/mail by airport, carrier & type of operation, and type of aircraft.

Reporting period: Calendar Year
Latest edition: 1987 data
Order from: Government Printing Office or
National Technical Information Service

Date 1988 Information
will be available: September 1989

Date next publication
is available: November 1989 (1988 data)

Person to contact: Patricia Beardsley

PREFACE

The FAA Statistical Handbook of Aviation is published annually by the Federal Aviation Administration (FAA). Its prime purpose is to serve as a convenient source for historical data and to assist in evaluating progress.

The Handbook should provide a valuable source of information for the Department of Transportation (DOT), operating offices of the FAA, the Research and Special Programs Administration (RSPA), and other government agencies, as well as nongovernment organizations interested in aviation.

Chapter I deals with the FAA and its functions. This section also includes a comparison of the agency's appropriations and the agency's personnel complement.

National Airspace System data reflecting the fiscal and calendar year workload of the FAA air traffic facilities--terminal and en route--are contained in Chapter II. This chapter contains air traffic activity reported by FAA-operated airport traffic control towers, air route traffic control centers, and domestic and international flight service stations.

Selected statistics concerning the Nation's airport facilities are presented in Chapter III by state within FAA regions. In addition to the total count of these facilities, this chapter includes statistics pertaining to the physical characteristics (paved vs. unpaved runways, lighted vs. unlighted runways, length of runways, etc.), and funds allocated for airport development.

Airport passenger, cargo, and freight statistics shown in Chapter IV were prepared from data published in Airport Activity Statistics of Certificated Route Air Carriers, which is issued jointly by the RSPA and the FAA. This chapter covers the activity of the large scheduled certificated air carriers only.

The U.S. civil air carrier fleet is described in detail in Chapter V. These statistics were developed from monthly Aircraft/Engine Utilization Reports submitted by the air carrier operators. The aircraft population discussed here is not an inventory of the aircraft owned by the air carriers, but represents the aircraft reported in air carrier use during the last quarter of the year.

U.S. civil air carrier operating data--revenue passenger miles flown, available seat-miles and enplanements, revenue ton-miles flown, revenue aircraft miles flown, and operating revenues and expenses of the large certificated air carriers--are presented in Chapter VI. These statistics were obtained from forms submitted by the large certificated route air carriers to the RSPA. Also included in Chapter VI are traffic statistics for the small certificated and commuter air carriers.

The airmen data shown in Chapter VII were obtained from official airmen certification records maintained by the FAA's Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma. These data included the number of airmen as of the end of each year and the number of certificates issued during the year.

The general aviation aircraft data presented in Chapter VIII were collected from the General Aviation Activity and Avionics Survey. Numbers of active aircraft and hours flown are shown for each aircraft type, use category and state.

Aircraft accidents, both air carrier and general aviation, appear in Chapter IX. These data were furnished by the National Transportation Safety Board (NTSB).

Aeronautical production and imports/exports are summarized in Chapter X. The production information was obtained from reports submitted to the U.S. Bureau of the Census by all known producers of complete aircraft and aircraft engines. Import/export data were obtained through Aerospace Industries Association, Inc. based on Bureau of the Census data from special monthly compilation of annual reports FT-446 and FT-410, respectively.

The FAA Statistical Handbook of Aviation is prepared by the Statistical Analysis Branch, Management Standards and Statistics Division, Office of Management Systems, with the cooperation of other FAA offices. Special appreciation is expressed to the Research and Special Programs Administration, U.S. Bureau of the Census, the National Transportation Safety Board, and many municipalities and private organizations for their assistance.

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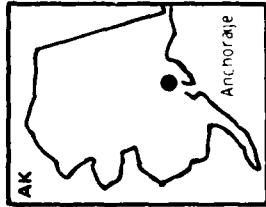
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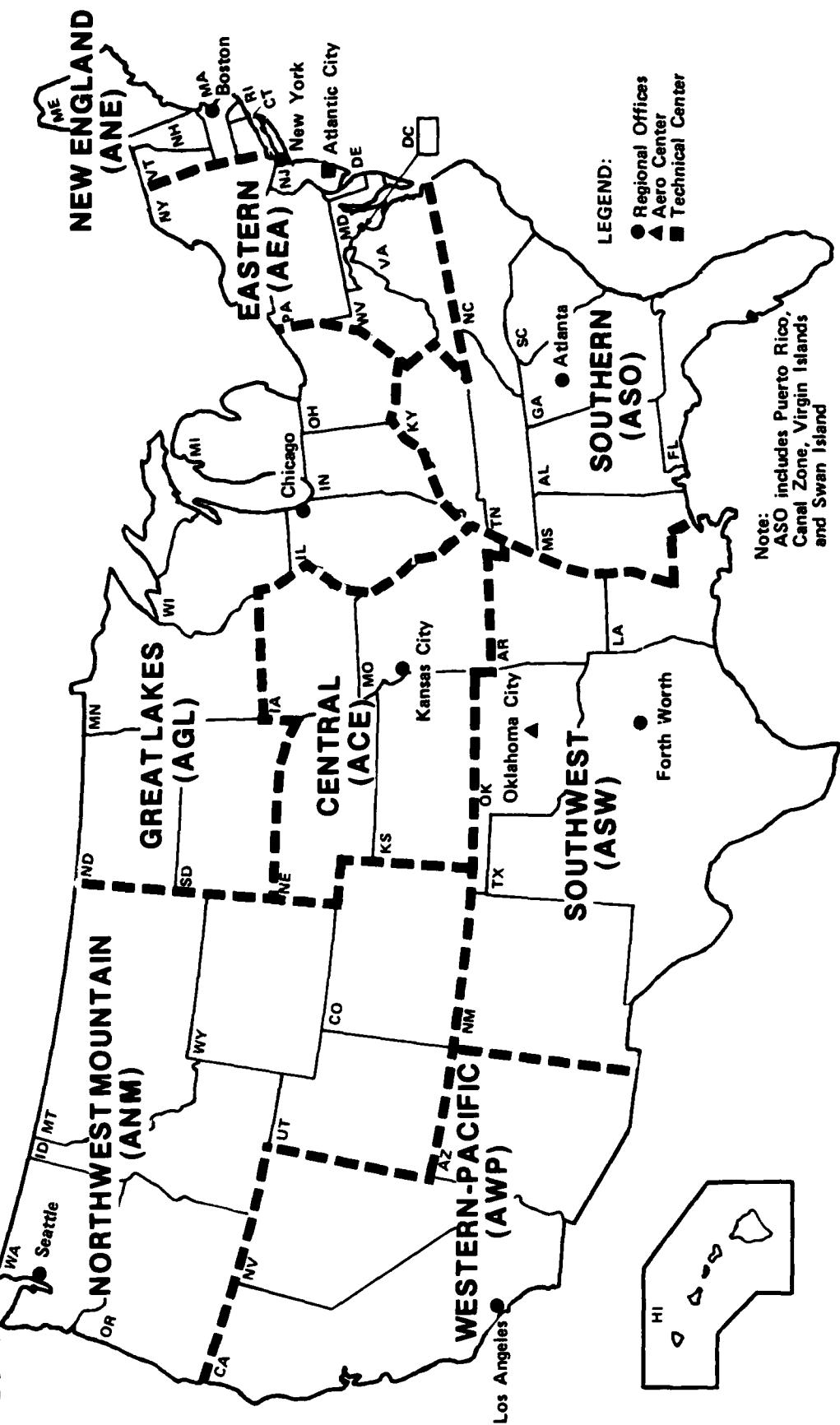
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FAA REGIONAL BOUNDARIES

Includes Locations of Regional Headquarters and Centers



Alaskan Region AAI



I. THE FEDERAL AVIATION ADMINISTRATION

The Department of Transportation Act of 1966 established a new executive department known as the Department of Transportation. The general welfare, economic growth, stability, and security of the nation pointed to the need for the development of national transportation policies and programs effectively utilizing the nation's transportation resources. The Act provided for inclusion of the Federal Aviation Agency in the Department as the Federal Aviation Administration.

Directed by an Administrator, who is appointed by the President, by and with the advice and consent of the Senate, the FAA has as its primary function the fostering of the development and safety of American aviation. More specifically, the FAA is responsible for developing the major policies necessary to guide the long-range growth of civil aviation; modernizing the air traffic control system; establishing in a single authority the essential management functions necessary to support the common needs of civil and military operations; providing for the most effective and efficient use of the airspace over the United States; and for the rulemaking responsibilities relative to these functions.

The FAA constructs, operates, and maintains the National Airspace System and the facilities which are a part of the system; it allocates and regulates the use of the airspace; it ensures adequate separation between aircraft operating in controlled airspace; and, through research and development programs, it provides new systems and equipment for improving utilization of the nation's airspace.

The Federal Aid to Airports Program (FAAP) authorized the FAA to make grants of federal funds to sponsors for airport development and for advanced planning and engineering. Under FAAP, approximately \$1.2 billion were granted by FAA to airport sponsors for airport development purposes from

1947 through 1970. FAAP was superseded by the Airport Development Act of 1970, the Airport and Airway Improvement Act of 1982, and the Airport and Airway Safety and Capacity Expansion Act of 1987 which amended the Airport and Airway Improvement Act of 1982.

The FAA prescribes and administers rules and regulations concerning airmen competency, aircraft airworthiness, and air traffic control. It promotes safety through certification of airmen, aircraft, and flight and aircraft maintenance schools. It reviews the design, structure, and performance of new aircraft to insure the safety of the flying public.

Services provided by FAA toward the development of aviation and air commerce include:

Dissemination of news and information on civil aviation generally.

Publication of flight information data for pilots.

Technical aviation assistance to other governments, operation of overseas civil aviation missions, and the aviation training of foreign nationals.

Development of medical standards for airmen through aviation medical research.

Research and development in the field of aeronautics and electronics.

Other activities required to encourage and foster the worldwide development of civil aviation and air commerce.

Policies governing these programs are developed in the Washington headquarters of FAA, and are executed by field employees.

The FAA has nine regional offices strategically located throughout the United States as well as the FAA Technical Center at Atlantic City, New Jersey, and the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma.

TABLE 1.1

FAA BUDGET AUTHORITY
FISCAL YEARS 1984 - 1988
(\$ IN MILLIONS)

Appropriation	1984	1985	1986	1987	1988
Total	<u>4,642.7</u> ^(R)	<u>5,355.8</u> ^(R)	<u>4,869.3</u> ^(R)	<u>4,946.1</u> ^R	<u>6,147.0</u>
Operations (General Fund)	2,530.0 ^(R)	1,589.4 ^(R)	2,237.4	2,302.8 ^R	2,322.6
Operations (Airport and Airway Trust Fund)	—	1,110.0	426.8 ^(R)	621.2 ^R	827.4
Headquarters Administration	56.9	0.0 ^{(a)(R)}	60.3	35.1	35.5
Facilities and Equipment (Airport and Airway Trust Fund)	750.0	1,358.0 ^(R)	895.1	804.6	1,108.1
Grants-in-Aid for Airports (Airport and Airway Trust Fund)					
Contract Authority (Obligation Limitation)	993.5 (800.0)	987.0 (925.0)	973.3 (885.2)	1,017.2 (1,025.0)	1,700.0 (1,268.7)
Research, Engineering and Development (Airport and Airway Trust Fund)	263.5	265.0	237.1 ^(R)	141.7	153.4
Metropolitan Washington Airports	48.8 ^(R)	46.4 ^(R)	39.3	23.5 ^(b)	0.0 ^(b)

^a Headquarters Administration included in the Operations appropriation in fiscal year 1985.

^b Metropolitan Washington Airports transferred to Regional Authority, June 1987.

TABLE 1.2
FAA CIVILIAN EMPLOYEES AT END OF FISCAL AND
CALENDAR YEARS 1978 - 1987
(SEE NOTE BELOW)

Date	FAA Total Paid	Full Time Permanent			
		Washington Office	Washington Field ^a	Other Field	Total
9/78	57,494	2,303	909	52,015	55,227
12/78	57,005	2,272	921	51,747	54,940
9/79	56,435	2,124	888	51,432	54,444
12/79	56,394	2,144	922	51,498	54,564
9/80	55,361	2,060	918	50,560	53,538
12/80	55,340	2,069	942	50,500	53,511
9/81	42,590	1,951	185	39,123	41,259
12/81	44,640	1,940	190	40,378	42,508
9/82	46,511	1,868	173	42,929	44,970
12/82	46,897	1,866	168	43,415	45,449
9/83	46,922	1,906	155	45,317	45,317
12/83	46,993	1,911	144	43,266	45,321
9/84	47,216	1,943	116	43,733	45,792
12/84	47,178	1,959	130	43,810	45,899
9/85	47,138	2,012	132	43,651	45,795
12/85	47,245	2,033	136	43,660	45,829
9/86	46,682	2,022	140	43,477	45,639
12/86	46,809	2,050	144	43,438	45,632
9/87	47,897	2,142	152	44,204	46,498
12/87	47,907	2,156	157	44,148	46,461

^a Beginning with 1981 employees from National and Dulles Airports are reported under "Other Field".

NOTE: FAA Total Paid includes full-time, part-time, and intermittent. Full-time includes permanent paid full-time employees who occupy permanent positions.

Washington Office includes all paid Washington headquarters employees whose duty station is Washington, D.C.

Washington Field includes all paid Washington, D.C. employees (e.g., National and Dulles Airports, in other states, or foreign countries).

Other Field includes all paid employees whose duty stations are in the regions or centers.

TABLE 1.3

NUMBER OF TOTAL PAID FAA EMPLOYEES AS OF DECEMBER 31, 1978 - 1987

Occupation	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Air Traffic Control Specialists	27,688	27,783	27,190	17,418	20,906	21,271	21,759	22,114	22,036	22,651
Electronics Technicians	9,423	9,209	8,871	8,432	8,031	7,633	7,229	6,856	6,600	6,788
Aviation Safety Inspectors	1,999	2,016	2,038	1,942	1,835	1,805	1,945	1,897	2,204	2,350
Engineers	2,576	2,501	2,436	2,274	2,238	2,313	2,419	2,450	2,417	2,579
All Others	15,319	14,685	14,805	14,574	13,887	13,971	13,826	13,928	13,552	13,539
Total Employment	57,005	56,394	55,340	44,640	46,897	46,993	47,178	47,245	46,809	47,907

II. THE NATIONAL AIRSPACE SYSTEM

This chapter furnishes terminal and en route air traffic activity information of the National Airspace System for fiscal and calendar years. The data have been reported by the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, and flight service facilities (Flight Service Stations, Automated Flight Service Stations and International Flight Service Stations). These reports are used as a guide in determining the need for larger or additional facilities, and possible changes in the number of personnel at existing facilities.

Terminal information includes airport operations, instrument operations, and instrument approaches. Airport operations are landings and takeoffs reported by towers by aviation categories--air carrier, air taxi, general aviation, and military. Instrument operations are takeoffs, landings, and overflights of aircraft operating in accordance with an IFR flight plan. Instrument approaches are approaches made to an airport by an aircraft on an IFR flight plan under IFR weather conditions.

Data for Air Route Traffic Control Centers (ARTCCs) include departures, overflights, and aircraft handled.

Activities for Flight Service Stations, Automated Flight Service Stations and International Flight Service Stations include flight plans originated airport advisories, pilot briefs, and aircraft contacted.

More detailed data pertaining to activity of these facilities may be found in FAA Air Traffic Activity.

TABLE 2.1*

U.S. AIR ROUTE AIRWAY MILEAGE: 1978 - 1987

(Contiguous 48 States)

December 31	Very High Frequency VOR/VORTAC		
	Low Altitude		Jet Routes
	Direct	Alternate	
1978	155,242	31,235	134,709
1979	157,853	31,625	135,920
1980	159,008	31,409	137,503
1981	160,823	29,137	138,550
1982	167,637	20,067	138,438
1983	169,471	15,359	139,477
1984	171,873	12,188	141,199
1985	182,182	3,306	142,658
1986	184,229	905	146,869
1987	184,644	543	147,678

* Mileage shown in nautical miles based on National Ocean Survey figures.

TABLE 2.2

FAA AIR ROUTE FACILITIES AND SERVICES: 1978 - 1987

December 31	VOR/ VORTAC	Nondirec- tional Radio Beacons	Air Route Traffic Control Centers	Airport Traffic Control Towers	Flight Service Stations	Inter- national Flight Service Stations	Instrument Landing Systems	Radar Equipment
1978	1,020	988	25	494	319	6	698	185
1979	1,028	1,015	25	499	318	6	753	192
1980	1,037	1,055	25	502	317	6	796	192
1981	1,033	1,123	25	501	316	6	840	199
1982	1,029	1,143	25	492	316	6	884	197
1983	1,032	1,183	25	494	316	5	934	197
1984	1,035	1,211	25	497	310	5	955	197
1985	1,039	1,222	25	500	302	4	968	198
1986	1,043	1,239	25	686	293	3	977	312
1987	1,045 ^a	1,262 ^b	25 ^c	686 ^d	253	3	1,111 ^e	312 ^f

^a Includes 74 nonfederal and 37 military.^b Includes 891 nonfederal and 66 military.^c Includes 3 military combined center/radar approach control facilities (CERAP).^d Includes 58 nonfederal and 209 military.^e Includes 18 Landing Directional Aids (LDA), 123 nonfederal, 20 military, 178 partial, 7 Interim Microwave Landing Systems (IMLS), and 36 Simplified Direction Finders (SDF).^f Includes FAA, military and non federal

FISCAL YEARS
(TABLES 2.3 - 2.10)

TABLE 2.3

AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY
FISCAL YEARS 1983 - 1987

AIRCRAFT HANDLED									
		Total		Air Carrier		Air Taxi		General Aviation	
Year		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>IFR</u>		35,794,403	+5%	17,115,080	+7%	5,283,267	+5%	8,102,631	+1%
<u>Aircraft</u>	1986	34,177,045	+4%	16,009,336	+9%	5,020,069	+5%	8,056,741	-3%
<u>Handled</u> ¹	1985	32,708,709	+4%	14,627,050	+4%	4,795,199	+10%	8,329,512	+1%
	1984	31,615,486	+8%	14,110,659	+6%	4,369,149	+18%	8,267,069	+6%
	1983	29,361,418	+5%	13,295,889	+5%	3,702,708	+11%	7,796,554	+4%
<u>IFR</u>	1987	13,768,267	+4%	6,043,020	+6%	2,458,714	+5%	3,392,926	-(*)
<u>Departures</u>	1986	13,245,340	+4%	5,719,626	+9%	2,335,006	+5%	3,398,856	-4%
	1985	12,784,292	+4%	5,261,858	+5%	2,232,782	+9%	3,535,541	+1%
	1984	12,290,114	+9%	5,030,352	+8%	2,048,462	+17%	3,491,714	+6%
	1983	11,280,546	+5%	4,662,715	+5%	1,749,840	+11%	3,278,692	+4%
<u>IFR Over</u>	1987	8,257,869	+7%	5,029,040	+10%	365,839	+5%	1,316,779	+5%
	1986	7,686,365	+8%	4,570,084	+11%	350,057	+6%	1,257,029	-(*)
	1985	7,140,125	+2%	4,103,334	+1%	329,635	+21%	1,258,430	-2%
	1984	7,035,058	+3%	4,049,955	+2%	272,225	+34%	1,283,641	+4%
	1983	6,800,326	+5%	3,970,459	+4%	203,028	+17%	1,239,170	+5%

(*) Less than 0.5 percent.

¹ The number of IFR Departures multiplied by two, plus the number of IFR Over.

TABLE 2.4

AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY
FISCAL YEARS 1983 - 1987

		AIRPORT OPERATIONS							
		Air Carrier		Air Taxi		General Aviation		Military	
Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Total Airport Operations</u>	1987	60,976,559	+3%	13,062,061	+6%	7,347,057	+6%	37,830,524	+2%
	1986	58,956,464	+2%	12,300,371	+9%	6,915,478	-(*)	37,100,657	-(*)
	1985	57,937,465	+2%	11,281,308	+4%	6,916,241	+5%	37,191,215	+1%
	1984	56,958,937	+7%	10,879,575	+12%	6,607,453	+13%	37,021,894	+5%
	1983	53,320,931	+5%	9,673,951	+7%	5,854,910	+15%	35,327,905	+3%
<u>Itinerant Operations</u>	1987	43,869,898	+3%	13,062,061	+6%	7,347,057	+6%	22,078,782	+1%
	1986	42,515,777	+2%	12,300,371	+9%	6,915,478	-(*)	21,942,188	-2%
	1985	41,864,894	+2%	11,281,308	+4%	6,916,241	+5%	22,373,031	+(*)
	1984	41,071,969	+8%	10,679,575	+12%	6,607,453	+13%	22,348,163	+5%
	1983	38,022,753	+6%	9,673,951	+7%	5,854,910	+15%	21,293,140	+3%
<u>Local Operations</u>	1987	17,106,661	+4%	—	—	—	—	15,751,742	-4%
	1986	16,440,687	+2%	—	—	—	—	15,158,469	+2%
	1985	16,072,571	+1%	—	—	—	—	14,818,184	+1%
	1984	15,886,968	+4%	—	—	—	—	14,673,731	+5%
	1983	15,298,178	+4%	—	—	—	—	14,034,765	+4%

(*) Less than 0.5 percent.

TABLE 2.5

AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY
FISCAL YEARS 1983 - 1987

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>Total Instrument Operations</u>	1987	43,407,628	+7%	13,730,330	+8%	7,320,676	+10%	17,914,358	+7%	4,442,264	+3%
	1986	40,466,365	+5%	12,752,823	+9%	6,626,572	+4%	16,787,756	+2%	4,299,214	+4%
	1985	38,702,396	+4%	11,751,323	+4%	6,390,297	+7%	16,428,676	+3%	4,132,100	+4%
	1984	37,327,046	+10%	11,333,489	+12%	5,997,079	+12%	16,023,211	+9%	3,973,267	+4%
	1983	34,039,181	+8%	10,126,868	+6%	5,346,419	+5%	14,755,146	+6%	3,810,748	+6%
<u>Total Instrument Approaches</u>	1987	2,306,401	-10%	870,189	-14%	483,441	-4%	818,163	-12%	134,608	-3%
	1986	2,570,631	+11%	1,003,540	+31%	501,474	+8%	927,007	+11%	136,610	+9%
	1985	2,196,181	-3%	767,729	-1%	463,204	-4%	837,663	-6%	127,585	-1%
	1984	2,273,516	+12%	773,385	+15%	463,389	+15%	887,424	+6%	129,318	+6%
	1983	2,033,427	-1%	673,229	-5%	420,161	+8%	818,216	-2%	121,821	+1%
<u>Total Instrument Approaches at Control Facilities</u>	1987	2,123,347	-11%	853,670	-14%	423,214	-4%	723,447	-13%	123,016	-3%
	1986	2,384,088	+17%	987,835	+31%	440,339	+8%	829,273	+11%	126,641	+10%
	1985	2,029,327	-3%	754,812	-1%	409,177	-6%	750,387	-5%	114,951	+6%
	1984	2,091,167	+11%	759,595	+16%	433,144	+14%	790,230	+7%	108,198	-3%
	1983	1,887,313	-2%	656,506	-5%	378,313	+7%	740,400	-5%	112,094	+1%

(*) Less than 0.5 percent.

1 Excludes instrument approaches provided by Air Route Traffic Control Centers.

TABLE 2.6

AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES
FISCAL YEARS 1983 - 1987

		Flight Services ¹			Flight Plans Originated			Airport Advisories			Pilot Briefs		
	Year	Total	Annual Change	Total	Annual Change	IFR-DVFR	Annual Change	VFR	Annual Change	Total	Annual Change	Total	Annual Change
<u>Flight Service Stations</u>	1987	47,747,493	-3%	7,643,574	+2%	5,943,542	+1%	1,700,032	+5%	2,414,289	-7%	12,750,575	-5%
	1986	48,982,535	-7%	7,517,796	-6%	5,896,633	-6%	1,621,163	-5%	2,595,833	-8%	13,381,434	-8%
	1985	52,866,048	-4%	7,985,889	-2%	6,287,882	-2%	1,698,007	-4%	2,826,294	-5%	14,578,867	-4%
	1984	54,779,576	-4%	8,176,075	+(*)	6,405,209	+2%	1,770,866	-4%	2,963,968	-5%	15,141,954	-6%
	1983	56,878,249	-9%	8,136,183	-4%	6,287,319	-4%	1,850,864	-6%	3,105,482	-14%	16,030,290	-10%
<u>International Flight Service Stations</u>	1987	1,438,354	-8%	315,299	-1%	151,314	+6%	163,985	-6%	8,039	-11%	241,320	-12%
	1986	1,562,753	-25%	317,233	-17%	142,558	-21%	174,675	-13%	9,062	-3%	274,015	-37%
	1985	2,097,001	-1%	380,168	+3%	179,428	-4%	200,740	+9%	9,339	-41%	437,432	+2%
	1984	2,121,709	-3%	370,513	-2%	185,954	+3%	184,559	-7%	15,883	+31%	430,352	+3%
	1983	2,178,611	-5%	378,628	-7%	179,994	-3%	198,634	-10%	12,143	-53%	417,698	-(*)

(*) Less than 0.5 percent.

¹ The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted (see Table 2.7).

No credit is allowed for airport advisories.

TABLE 2.7

AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY
FISCAL YEARS 1983 - 1987

		AIRCRAFT CONTACTED						Military			
		Total		Air Carrier		Air Taxi		General Aviation			
Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Flight</u>	1987	6,959,195	-3%	354,388	-5%	948,407	-5%	5,208,721	-3%	447,679	+4%
<u>Service</u>	1986	7,184,075	-7%	372,223	-4%	998,498	-9%	5,382,619	-8%	430,735	+1%
<u>Stations</u>	1985	7,738,536	-5%	386,479	-7%	1,101,020	+(*)	5,826,387	-6%	424,650	+1%
	1984	8,143,518	-5%	415,984	+5%	1,097,332	+1%	6,208,177	-6%	422,025	-1%
	1983	8,541,303	-12%	396,442	-8%	1,036,094	-9%	6,633,821	-14%	424,946	-1%
<u>IFR-DMR</u>	1987	2,042,270	-2%	331,368	-4%	423,643	-2%	1,129,239	-3%	158,020	+9%
	1986	2,087,519	-6%	345,735	-1%	432,683	-6%	1,163,883	-7%	145,218	-3%
	1985	2,211,819	-3%	349,104	-3%	460,369	+(*)	1,253,174	-5%	149,172	+3%
	1984	2,280,781	+1L%	358,758	+12%	459,039	+5%	1,317,446	-2%	145,538	+4%
	1983	2,250,370	-1L%	321,699	-8%	439,243	-6%	1,349,624	-14%	139,804	+4%
<u>VFR</u>	1987	4,916,925	-4%	23,020	-13%	524,764	-7%	4,079,482	-3%	289,659	+1%
	1986	5,096,556	-8%	26,488	-2%	565,815	-12%	4,218,736	-8%	285,517	+4%
	1985	5,526,717	-6%	37,375	-35%	640,651	+(*)	4,573,213	-6%	275,478	-(*)
	1984	5,862,737	-7%	57,226	-23%	638,293	-1%	4,890,731	-7%	276,487	-3%
	1983	6,290,933	-13%	74,743	-9%	646,851	-11%	5,284,197	-13%	285,142	-3%

(*) Less than 0.5 percent.

TABLE 2.7 (continued)

AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY
FISCAL YEARS 1983 - 1987

		AIRCRAFT CONTACTED						
		Air Carrier			General Aviation		Military	
Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>International</u>								
1987	325,116	-15%	11,251	+6%	99,531	-32%	207,605	-4%
1986	380,257	-18%	10,649	+16%	147,159	-5%	215,941	-26%
1985	461,801	-11%	9,142	-86%	154,434	+7%	290,684	-3%
1984	519,979	-11%	66,430	-44%	144,390	-4%	298,528	+1%
1983	585,959	-8%	118,511	-15%	150,420	-12%	296,198	-10%
<u>Flight Service Stations</u>								
1987	36,995	-12%	10,712	+3%	4,171	+40%	19,461	-10%
1986	37,221	-3%	10,415	+17%	2,979	-42%	21,562	-2%
1985	38,490	-59%	8,927	-86%	5,121	+20%	21,935	+19%
1984	94,745	-39%	65,998	-44%	4,255	+23%	18,394	-4%
1983	156,438	-6%	117,854	-13%	3,470	+18%	19,062	-21%
<u>IFR-DVFR</u>								
1987	288,121	-16%	539	+30%	95,360	-34%	188,144	-3%
1986	343,036	-19%	234	+9%	144,180	-3%	194,379	-28%
1985	423,311	-1%	215	-50%	149,313	-7%	286,749	-4%
1984	425,234	-1%	432	-34%	140,135	-5%	280,134	+1%
1983	429,521	-9%	657	-87%	146,950	-1%	277,136	-9%
<u>VFR</u>								
1987								
1986								
1985								
1984								
1983								

TABLE 2.8

TOP 25 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF TOTAL OPERATIONS
AND BY AVIATION CATEGORY INCLUDING AIR CARRIER RANK
FISCAL YEAR 1987

Tower	Total Operations Rank	Air Carrier Rank	Air Taxi	General Aviation	Military
Atlanta International	1	801,833	2	579,898	190,742
Chicago O'Hare Int'l	2	796,609	1	703,763	54,128
Los Angeles International	3	655,189	4	416,063	170,765
Dallas Ft. Worth Reg'l	4	609,300	3	492,591	94,841
Santa Ana	5	526,798	56	61,630	26,142
Denver Stapleton Int'l	6	521,608	5	369,024	108,318
Van Nuys	7	492,936	266	22	422
San Francisco	8	451,132	6	329,196	82,909
Long Beach	9	438,496	120	13,748	2,387
Boston Logan	10	435,923	13	248,048	137,913
Phoenix Sky Harbor Int'l	11	435,836	14	244,309	67,297
St. Louis Int'l	12	426,828	7	280,092	87,652
Philadelphia Int'l	13	412,083	25	188,091	158,492
Detroit Metro Wayne Co.	14	411,628	10	267,067	77,563
Oakland International	15	397,658	45	80,608	41,258
Honolulu	16	389,035	18	214,028	65,993
Las Vegas McCarran	17	388,962	22	192,770	77,017
Pontiac	18	386,292	238	343	5,662
Memphis Int'l	19	384,049	17	217,145	71,746
Minneapolis St. Paul Int'l	20	383,420	11	265,699	39,422
Newark	21	383,357	8	278,726	76,436
Seattle Boeing	22	377,407	183	4,602	15,682
Pittsburgh Greater Int'l	23	371,221	15	241,212	94,542
La Guardia	24	366,013	9	267,412	68,925
Miami International	25	363,693	11	250,418	47,759

(NA) Not applicable.

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers.

Air Carrier operations rank was based on air carrier activity at 303 FAA-Operated Towers.
Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.9

TOP 25 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF AIR CARRIER OPERATIONS
 AND BY AVIATION CATEGORY INCLUDING TOTAL OPERATIONS RANK
 FISCAL YEAR 1987

Tower	Air Carrier Rank	Air Taxi	General Aviation	Military	Total Operations Rank
Chicago O'Hare Int'l	1	703,763	54,128	35,245	2 796,609
Atlanta International	2	579,898	190,742	29,642	1 801,833
Dallas Ft. Worth Reg'l	3	492,591	94,841	20,774	4 609,300
Los Angeles Int'l	4	416,063	170,765	63,766	3 655,189
Denver Stapleton Int'l	5	369,024	108,318	41,772	6 521,608
San Francisco	6	329,196	82,909	36,344	8 451,132
St. Louis Int'l	7	280,092	87,652	47,264	12 426,828
Newark	8	278,726	76,436	27,759	21 383,357
La Guardia	9	267,412	68,925	29,175	24 366,013
Detroit Metro Wayne County	10	267,067	77,563	66,663	14 411,628
Minneapolis St. Paul Int'l	11	265,699	39,422	72,739	20 383,420
Miami International	12	250,418	47,759	64,875	25 363,693
Boston Logan	13	248,048	137,913	49,691	10 435,923
Phoenix Sky Harbor Int'l	14	244,309	67,297	117,328	11 435,836
Pittsburgh Greater Int'l	15	241,212	94,542	28,239	23 371,221
Houston Intercontinental	16	223,833	27,789	49,832	32 303,332
Memphis International	17	217,145	71,746	89,988	19 384,049
Honolulu	18	214,028	65,993	85,090	16 389,035
John F. Kennedy Int'l	19	205,954	78,803	26,030	30 311,501
Cincinnati Greater	20	203,159	2,280	25,181	61 230,901
Washington Dulles Int'l	21	193,149	27,608	70,058	34 295,939
Las Vegas McCarren	22	192,770	77,017	113,129	17 388,962
Orlando Int'l Airport	23	192,610	20,649	35,492	44 251,602
Washington National	24	188,933	60,098	74,890	29 324,368
Philadelphia Int'l	25	188,091	158,492	64,367	13 412,083

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers.

Air Carrier operations rank was based on air carrier activity at 303 FAA-Operated Towers.
 Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.10

TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS,
 AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS, AND INTERNATIONAL
 FLIGHT SERVICE STATIONS
 FISCAL YEAR 1967

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted		Total Flight Services	
			Flight Service Stations	Int'l Flight Service Sta.	Flight Service Stations	Int'l Flight Service Sta.
TOTAL	60,976,559	35,794,403	6,959,195	325,116	47,747,493	1,438,354
Alaskan—Total	<u>1,082,409</u>	<u>425,534</u>	<u>970,083</u>	—	<u>2,460,805</u>	—
Central—Total	<u>2,408,813</u>	<u>1,746,151</u>	<u>483,892</u>	—	<u>3,163,298</u>	—
Iowa	459,186	—	75,663	—	682,795	—
Kansas	471,489	—	155,147	—	747,859	—
Missouri	1,170,940	1,746,151	147,232	—	1,245,770	—
Nebraska	307,198	—	105,850	—	486,874	—
Eastern—Total	<u>8,326,981</u>	<u>4,031,179</u>	<u>584,389</u>	—	<u>6,940,415</u>	—
Delaware	194,015	—	—	—	—	—
District of Columbia	324,368	2,267,578	58,915	—	751,481	—
Maryland	512,922	—	55,834	—	165,424	—
New Jersey	1,336,010	—	54,566	—	890,760	—
New York	2,557,528	1,763,601	133,550	—	1,933,942	—
Pennsylvania	1,926,065	—	152,976	—	1,909,686	—
Virginia	1,092,852	—	39,139	—	513,765	—
West Virginia	384,321	—	89,409	—	775,357	—
Great Lakes—Total	<u>9,731,124</u>	<u>7,962,650</u>	<u>882,425</u>	—	<u>7,815,737</u>	—
Illinois	2,799,661	2,344,914	120,403	—	1,330,315	—
Indiana	841,021	1,747,863	94,181	—	1,274,073	—
Michigan	2,086,324	—	127,597	—	1,193,685	—
Minnesota	1,033,632	1,605,010	110,021	—	564,791	—
North Dakota	424,091	—	61,916	—	381,012	—
Ohio	1,506,078	2,264,863	139,280	—	1,891,438	—
South Dakota	158,479	—	114,601	—	390,907	—
Wisconsin	881,838	—	114,416	—	789,516	—
New England—Total	<u>3,626,668</u>	<u>1,667,851</u>	<u>199,679</u>	—	<u>1,896,697</u>	—
Connecticut	913,519	—	72,769	—	1,149,605	—
Maine	243,296	—	51,538	—	342,258	—
Massachusetts	1,868,746	1,667,851	—	—	—	—
New Hampshire	245,984	—	47,489	—	224,379	—
Rhode Island	212,218	—	—	—	—	—
Vermont	142,905	—	27,883	—	182,455	—

TABLE 2.10 (Continued)

TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS,
 AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS, AND INTERNATIONAL
 FLIGHT SERVICE STATIONS
 FISCAL YEAR 1987

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted		Total Flight Services	
			Flight Service Stations	Int'l Flight Service Sta.	Flight Service Stations	Int'l Flight Service Sta.
Northwest Mountain—Total	<u>5,073,832</u>	<u>3,565,325</u>	<u>917,627</u>	—	<u>3,989,265</u>	—
Colorado	1,384,802	1,279,143	157,228	—	838,676	—
Idaho	346,763	—	52,571	—	259,215	—
Montana	295,723	—	163,420	—	500,620	—
Oregon	814,482	—	119,849	—	595,599	—
Utah	398,261	1,075,583	71,526	—	350,292	—
Washington	1,709,146	1,210,599	243,753	—	1,089,447	—
Wyoming	124,655	—	109,280	—	355,416	—
Southern—Total	<u>10,993,413</u>	<u>7,481,312</u>	<u>1,095,524</u>	<u>325,116</u>	<u>10,081,400</u>	<u>1,438,354</u>
Alabama	638,309	—	134,641	—	1,079,927	—
Florida	4,735,826	3,285,863	281,234	216,742	2,827,806	1,126,862
Georgia	1,552,200	2,350,555	139,022	—	1,467,134	—
Kentucky	707,810	—	107,612	—	678,826	—
Mississippi	321,512	—	62,343	—	455,821	—
North Carolina	1,114,624	—	143,749	—	1,374,637	—
Puerto Rico	285,474	—	—	108,374	—	311,492
South Carolina	457,309	—	90,188	—	911,174	—
Tennessee	1,016,731	1,844,894	136,735	—	1,286,075	—
Virgin Islands	163,618	—	—	—	—	—
Southwest—Total	<u>6,577,309</u>	<u>4,918,012</u>	<u>739,767</u>	—	<u>5,955,393</u>	—
Arkansas	351,225	—	97,372	—	607,948	—
Louisiana	1,086,081	—	48,695	—	674,981	—
New Mexico	375,620	1,458,525	143,497	—	570,801	—
Oklahoma	800,926	—	91,685	—	790,595	—
Texas	3,963,457	3,459,487	358,518	—	3,311,068	—
Western-Pacific—Total	<u>13,154,910</u>	<u>3,996,389</u>	<u>1,085,809</u>	—	<u>5,442,483</u>	—
American Samoa	12,381	—	—	—	—	—
Arizona	1,791,288	—	145,877	—	704,933	—
California	9,744,409	3,449,499	777,233	—	3,974,091	—
Guam	—	52,008	—	—	—	—
Hawaii	898,408	494,882	87,242	—	374,358	—
Nevada	683,703	—	75,457	—	389,101	—
Wake Island	24,721	—	—	—	—	—

CALENDAR YEARS
(Tables 2.11 - 2.18)

TABLE 2.11

AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY

CALENDAR YEARS 1983 - 1987

AIRCRAFT HANDLED										
Year	Total	Air Carrier		Air Taxi		General Aviation		Military		
		Annual Change	Total	Annual Change	Total	Annual Change	Total			
1987	36,112,129	+5%	17,452,192	+8%	5,388,048	+5%	8,096,582	+1%	5,183,307	+1%
1986	34,490,514	+4%	16,223,428	+9%	5,132,155	+6%	8,003,192	-3%	5,131,739	+3%
1985	33,019,705	+3%	14,924,724	+4%	4,844,414	+7%	8,244,445	-1%	5,006,122	+2%
1984	32,563,058	+7%	14,352,635	+7%	4,497,182	+16%	8,322,338	+4%	4,890,903	+6%
1983	29,923,835	+6%	13,422,713	+5%	3,872,325	+13%	8,012,514	+6%	4,616,283	+5%
IFF Aircraft Handled										
1987	13,866,150	+4%	6,139,083	+6%	2,516,471	+6%	3,384,539	+(*)	1,826,057	+1%
1986	13,338,657	+4%	5,782,325	+8%	2,386,794	+6%	3,370,374	-3%	1,805,164	+2%
1985	12,875,279	+3%	5,356,781	+6%	2,255,695	+7%	3,492,284	-1%	1,770,519	+2%
1984	12,493,511	+8%	5,137,502	+9%	2,102,711	+15%	3,524,746	+5%	1,728,552	+7%
1983	11,528,978	+7%	4,717,719	+5%	1,827,619	+13%	3,372,655	+6%	1,610,985	+4%
IFF Departures										
1987	8,379,829	+7%	5,174,026	+11%	347,106	-6%	1,327,504	+5%	1,531,193	+1%
1986	7,813,200	+7%	4,658,778	+11%	370,567	+11%	1,262,444	+(*)	1,521,411	+4%
1985	7,269,147	+3%	4,211,162	+3%	333,024	+12%	1,259,877	-1%	1,465,084	+2%
1984	7,076,036	+3%	4,077,631	+2%	291,760	+34%	1,272,846	+1%	1,433,799	+3%
1983	6,865,879	+5%	3,987,275	+3%	217,087	+16%	1,267,204	+6%	1,394,313	+6%
IFF Overs										
1987										

(*) Less than 0.5 percent.
¹ The number of IFF Departures multiplied by two, plus the number of IFR Overs.

TABLE 2.12

AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY
CALENDAR YEARS 1983 - 1987

AIRPORT OPERATIONS									
		Total		Air Carrier		Air Taxi		General Aviation	
Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Total Airport Operations</u>	1987 61,004,284	+2%	13,092,751	+5%	7,553,620	+9%	37,575,141	-(*)	
1986 59,754,343	+3%	12,523,570	+9%	6,945,108	-(*)	37,637,377	+2%		
1985 58,021,521	+1%	11,450,621	+3%	6,949,436	+3%	37,044,465	-1%		
1984 57,755,928	+7%	11,110,294	+12%	6,735,875	+11%	37,437,851	+6%		
1983 53,857,965	+6%	9,907,170	+8%	6,059,840	+16%	35,429,952	+5%		
<u>Itinerant Operations</u>	1987 44,039,814	+3%	13,092,751	+5%	7,553,620	+9%	21,993,252	-(*)	
1986 42,919,234	+2%	12,523,570	+9%	6,945,108	-(*)	22,098,066	-1%		
1985 42,000,109	+1%	11,450,621	+3%	6,949,436	+3%	22,278,498	-1%		
1984 41,684,589	+8%	11,110,294	+12%	6,735,875	+11%	22,563,123	+6%		
1983 38,503,304	+7%	9,907,170	+8%	6,059,840	+16%	21,331,648	+4%		
<u>Local Operations</u>	1987 16,964,470	+1%	—	—	—	—	15,581,889	+(*)	
1986 16,835,109	+5%	—	—	—	—	—	15,539,311	+5%	
1985 16,021,412	-(*)	—	—	—	—	—	14,765,967	-1%	
1984 16,071,339	+5%	—	—	—	—	—	14,854,728	+5%	
1983 15,354,661	+5%	—	—	—	—	—	14,098,304	+6%	

(*) Less than 0.5 percent.

TABLE 2.13

AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY
CALENDAR YEARS 1983 - 1987

	Year	Total	Air Carrier		Air Taxi		General Aviation		Military		
			Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Total Instrument Operations</u>	1987	43,813,578	+6%	13,791,619	+6%	7,582,028	+12%	17,998,854	+5%	4,441,077	+2%
	1986	41,293,048	+6%	13,021,064	+9%	6,766,667	+5%	17,156,395	+1%	4,348,922	+4%
	1985	38,804,981	+2%	11,895,855	+3%	6,444,136	+5%	16,284,634	-(*)	4,180,356	+4%
	1984	37,987,665	+9%	11,562,870	+12%	6,108,342	+10%	16,315,315	+9%	4,001,138	+5%
	1983	34,732,933	+8%	10,358,246	+8%	5,553,722	+12%	14,997,375	+7%	3,823,590	+4%
<u>Total Instrument Approaches</u>	1987	2,087,672	-17%	803,771	-17%	459,405	-7%	708,701	-22%	115,795	-21%
	1986	2,518,380	+9%	962,993	+15%	454,075	+33%	914,107	+5%	147,205	+15%
	1985	2,299,572	-44%	822,497	+6%	480,898	+2%	870,545	+2%	125,632	+1%
	1984	2,219,561	+11%	770,761	+7%	473,332	+3%	851,238	-3%	124,230	-6%
	1983	2,193,583	-44%	721,988	+(*)	459,309	+13%	879,943	+2%	132,343	+5%
<u>Total Instrument Approaches at Control Facilities</u>	1987	1,904,605	-18%	788,015	-17%	395,786	-9%	616,231	-25%	104,573	-22%
	1986	2,330,153	+5%	945,599	+14%	433,426	+22%	816,590	+4%	134,538	+16%
	1985	2,128,936	+3%	810,009	+7%	424,261	+1%	781,110	+2%	113,556	+1%
	1984	2,059,527	+2%	757,378	+7%	422,336	+2%	767,273	-3%	112,540	-(*)
	1983	2,026,832	+2%	705,914	+(*)	412,482	+11%	795,607	+(*)	112,829	-2%

(*) Less than 0.5 percent.

1 Excludes instrument approaches provided by Air Route Traffic Control Centers.

TABLE 2.14

AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES
CALENDAR YEARS 1983 - 1987

	Flight Services ¹				Flight Plans Originated				Airport Advisories				Pilot Briefs	
	Year	Total	Annual Change	Total	Annual Change	IFR+VFR	Annual Change	VFR	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Flight Service</u>	1987	46,661,663	-4%	7,601,465	+1%	5,878,781	+(*)	1,722,684	+5%	2,305,151	-11%	12,321,658	-7%	
<u>Stations</u>	1986	48,727,382	-6%	7,503,913	-5%	5,867,455	-5%	1,636,458	-3%	2,584,214	-7%	13,281,761	-7%	
	1985	51,819,747	-5%	7,874,976	-4%	6,191,977	-44	1,682,999	-5%	2,774,929	-6%	14,230,398	-6%	
	1984	54,586,516	-3%	8,178,597	+(*)	6,420,450	+1%	1,758,147	-3%	2,940,906	-3%	15,076,778	-5%	
	1983	56,236,268	-8%	8,155,919	-3%	6,345,620	-2%	1,810,299	-6%	3,028,397	-12%	15,786,500	-9%	
<u>International</u>	1987	1,434,864	-6%	314,349	-1%	152,121	+5%	162,228	-6%	7,194	-23%	245,726	-7%	
<u>Flight Service</u>	1986	1,534,091	-26%	317,939	-16%	145,311	-18%	172,628	-13%	9,352	-3%	263,431	-39%	
<u>Stations</u>	1985	2,08C,472	-1%	377,347	+2%	178,134	-4%	199,213	+7%	9,599	-65%	434,303	+2%	
	1984	2,092,488	-4%	371,116	-2%	185,407	+2%	185,709	-5%	15,857	+51%	426,816	+1%	
	1983	2,178,043	-(*)	377,809	-2%	181,325	-2%	196,484	-1%	10,517	-56%	423,689	+4%	

(*) Less than 0.5 percent.

¹ The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted (see Table 2.15).

No credit is allowed for airport advisories.

TABLE 2.15

AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY
CALENDAR YEARS 1983 - 1987

		AIRCRAFT CONTACTED									
		Total		Air Carrier		Air Taxi		General Aviation		Military	
		Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change	
<u>Flight Service Stations</u>	1987	6,815,417	-5%	342,138	-6%	930,059	-5%	5,087,614	-6%	455,606	+7%
	1986	7,156,034	-6%	364,183	-6%	977,917	-10%	5,388,852	-6%	425,082	-2%
	1985	7,608,999	-6%	385,568	-8%	1,087,881	-1%	5,703,345	-8%	432,205	+2%
	1984	8,075,766	-3%	416,072	-30%	1,095,251	-(*)	6,141,629	-5%	422,814	+(*)
	1983	8,351,430	-11%	596,569	-6%	1,095,694	-7%	6,438,465	-12%	42C,702	-1%
<u>IFF-DVFR</u>	1987	1,964,873	-5%	321,056	-5%	417,846	-3%	1,067,407	-8%	158,564	+8%
	1986	2,073,740	-5%	339,552	-3%	429,062	-5%	1,158,869	-6%	146,257	-3%
	1985	2,180,265	-4%	351,775	-3%	450,979	-2%	1,227,469	-6%	150,042	+3%
	1984	2,266,652	-(*)	361,508	+10%	458,246	+1%	1,301,754	-5%	145,144	+2%
	1983	2,279,132	-7%	327,911	-4%	452,502	-3%	1,356,995	-10%	141,724	+4%
<u>VFR</u>	1987	4,850,544	-5%	21,082	-14%	512,213	-7%	4,026,207	-5%	297,642	+7%
	1986	5,082,294	-6%	24,631	-27%	548,855	-14%	4,229,983	-5%	278,825	-1%
	1985	5,428,734	-7%	33,793	-62%	636,902	-(*)	4,475,876	-8%	282,163	+1%
	1984	5,809,114	-4%	54,564	-21%	637,005	-1%	4,839,875	-5%	277,670	-(*)
	1983	6,072,298	-12%	68,658	-15%	643,192	-10%	5,081,470	-13%	278,978	-6%

(*) Less than 0.5 percent.

TABLE 2.15 (continued)

AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY
CALENDAR YEARS 1983 - 1987

AIRCRAFT CONTACTED								
	Total	Air Carrier	Air Taxi	General Aviation	Total	Annual Change	Total	Annual Change
Year	Total	Annual Change	Total	Annual Change	Total	Annual Change	Total	Annual Change
<u>International</u>	314,694	-15%	11,394	+5%	92,576	-33%	204,023	-5%
1987	314,694	-15%	11,394	+5%	92,576	-33%	204,023	-5%
1986	371,351	-19%	10,841	+11%	138,166	-10%	215,833	-24%
1985	457,172	-9%	9,763	-336%	154,021	+4%	285,780	-5%
1984	496,624	-14%	42,522	-63%	147,836	+2%	298,905	+2%
1983	575,047	-4%	115,281	-6%	144,260	-3%	294,006	-7%
							21,500	+78%
<u>Flight Service Stations</u>								
1987	36,779	-1%	11,077	+6%	4,447	+45%	18,672	-13%
1986	37,301	-5%	10,405	+8%	3,066	-37%	21,425	-5%
1985	39,377	-72%	9,595	-339%	4,850	+5%	22,511	+19%
1984	67,743	-60%	42,127	-63%	4,622	-33%	18,287	-4%
1983	153,923	+2%	114,585	-5%	3,475	+17%	19,013	-11%
							16,850	+287%
<u>IFR-VMFR</u>								
1987	277,915	-17%	317	-27%	88,129	-35%	185,351	-5%
1986	334,050	-20%	436	+160%	135,100	-9%	194,408	-26%
1985	417,795	-3%	168	-135%	149,171	+4%	263,269	-7%
1984	428,881	+2%	395	-43%	143,214	-2%	280,618	-2%
1983	421,124	-6%	696	-52%	140,785	-3%	274,993	-6%
							4,118	+(*)
<u>VFR</u>								
1987							4,106	-21%
1986							5,187	+10%
1985							4,654	+(*)
1984							4,650	-25%
1983								

(*) Less than 0.5 percent.

TABLE 2.16

TOP 25 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF TOTAL OPERATIONS
AND BY AVIATION CATEGORY INCLUDING AIR CARRIER RANK
CALENDAR YEAR 1987

Tower	Total Operations Rank	Air Carrier Rank	Air Taxi	General Aviation	Military
Atlanta International	1	796,939	2	573,534	192,662
Chicago O'Hare Int'l	2	791,886	1	685,693	69,114
Los Angeles International	3	667,186	4	428,227	171,065
Dallas Ft. Worth Regional	4	624,708	3	493,612	109,078
Denver Stapleton Int'l	5	520,858	5	372,980	105,668
Santa Ana	6	512,245	57	62,086	26,781
Van Nuys	7	476,627	277	12	495
San Francisco	8	455,874	6	330,152	89,257
Boston Logan	9	440,653	14	247,098	142,685
Phoenix Sky Harbor Int'l	10	438,438	13	252,964	65,955
Long Beach	11	434,995	116	15,056	2,991
St. Louis International	12	419,204	7	279,090	81,671
Philadelphia Int'l	13	417,668	24	190,634	165,420
Detroit Metro Wayne	14	404,624	10	260,124	75,858
Las Vegas McCarran Int'l	15	385,811	21	200,213	71,495
Honolulu	16	385,260	17	216,044	62,171
Minneapolis St Paul Int'l	17	383,423	11	255,923	48,772
Pontiac	18	381,647	237	324	5,957
Memphis International	19	380,911	18	214,410	72,216
Newark	20	377,902	8	275,140	75,075
Seattle Boeing	21	377,361	186	4,543	15,531
Charlotte Douglas	22	374,421	25	190,498	89,878
Pittsburgh Greater Int'l	23	373,796	15	244,930	94,796
Oakland International	24	363,887	47	76,142	39,867
La Guardia	25	363,733	9	266,862	67,940

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers.

Air Carrier operations rank was based on air carrier activity at 303 FAA-Operated Towers.
Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.17

TOP 25 FAA-OPERATED AIRPORT TRAFFIC CONTROL TOWERS, BY RANK ORDER OF AIR CARRIER OPERATIONS
AND BY AVIATION CATEGORY INCLUDING TOTAL OPERATIONS RANK
CALENDAR YEAR 1987

Tower	Air Carrier		Air Taxi	General Aviation	Military	Total Operations	
	Rank					Rank	
Chicago O'Hare International	1	685,693	69,114	33,684	3,395	2	791,886
Atlanta International	2	573,534	192,662	29,134	1,609	1	796,939
Dallas Ft. Worth Regional	3	493,612	109,078	20,753	1,265	4	624,708
Los Angeles Int'l	4	428,227	171,065	62,990	4,904	3	667,186
Denver Stapleton Int'l	5	372,980	105,668	39,469	2,741	5	520,858
San Francisco	6	330,152	89,257	33,736	2,729	8	455,874
St. Louis Int'l	7	279,090	81,671	46,537	11,906	12	419,204
Newark	8	275,140	75,075	27,191	496	20	377,902
La Guardia	9	266,862	67,940	28,369	562	25	363,733
Detroit Metro Wayne Co	10	260,124	75,858	68,289	353	14	404,624
Minneapolis St. Paul Int'l	11	255,923	48,772	73,218	5,510	17	383,423
Miami International	12	253,069	50,009	56,890	704	26	360,672
Phoenix Sky Harbor Int'l	13	252,964	65,955	112,763	6,756	10	438,438
Boston Logan	14	247,098	142,685	50,577	293	9	440,653
Pittsburgh Greater Int'l	15	244,930	94,796	26,903	7,167	23	373,796
Houston Intercontinental	16	224,703	25,507	48,367	1,399	32	299,976
Honolulu	17	216,044	62,171	83,535	23,510	16	385,260
Memphis International	18	214,470	72,216	88,413	5,812	19	380,911
John F. Kennedy Int'l	19	208,718	81,976	26,426	780	31	317,900
Cincinnati Greater	20	203,373	21,208	24,470	392	46	249,443
Las Vegas McCarran Int'l	21	200,213	71,495	107,935	6,168	15	385,811
Orlando Int'l	22	194,714	28,781	36,553	3,193	43	263,241
Washington Dulles Int'l	23	193,179	25,856	65,225	4,129	36	288,389
Philadelphia Int'l	24	190,634	165,420	60,410	1,204	13	417,668
Charlotte Douglas	25	190,498	89,878	90,161	3,884	22	374,421

NOTE: Total Operations rank was based on total air traffic activity at 400 FAA-Operated Towers.

Air Carrier operations rank was based on air carrier activity at 303 FAA-Operated Towers.
Not all FAA-Operated Towers handle air carrier operations.

TABLE 2.18

TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS,
 AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS AND INTERNATIONAL
 FLIGHT SERVICE STATIONS
 CALENDAR YEAR 1967

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted		Flight Services	
			Flight Service Stations	Int'l Flight Service Sta.	Flight Service Stations	Int'l Flight Service Sta.
TOTAL	61,004,284	36,112,129	6,815,417	314,694	46,661,663	1,434,844
Alaskan - Total	1,075,979	427,209	971,026	0	2,446,278	0
Central - Total	2,396,124	1,728,229	456,437	0	3,053,585	0
Iowa	461,683	—	66,585	—	653,429	—
Kansas	468,975	—	146,240	—	719,020	—
Missouri	1,157,688	1,728,229	142,679	—	1,207,213	—
Nebraska	307,778	—	100,933	—	473,923	—
Eastern - Total	8,293,196	4,060,381	552,987	0	6,733,165	0
Delaware	191,665	—	—	—	—	—
District of Columbia	325,144	2,295,370	61,031	—	792,613	—
Maryland	513,231	—	57,713	—	160,479	—
New Jersey	1,306,082	—	53,316	—	905,602	—
New York	2,538,539	1,765,011	113,299	—	1,848,065	—
Pennsylvania	1,941,967	—	149,381	—	1,831,515	—
Virginia	1,093,858	—	30,918	—	430,306	—
West Virginia	382,710	—	87,329	—	764,585	—
Great Lakes - Total	9,720,868	8,028,015	873,734	0	7,711,468	—
Illinois	2,803,692	2,353,192	116,710	—	1,281,498	—
Indiana	865,596	1,789,703	90,195	—	1,214,883	—
Michigan	2,082,565	—	124,284	—	1,143,420	—
Minnesota	1,022,972	1,612,999	117,375	—	634,709	—
North Dakota	413,030	—	60,024	—	374,166	—
Ohio	1,512,005	2,272,121	138,900	—	1,893,012	—
South Dakota	158,601	—	111,009	—	385,289	—
Wisconsin	862,407	—	115,237	—	784,491	—
New England - Total	3,630,958	1,676,245	182,606	0	1,938,882	0
Connecticut	913,083	—	72,150	—	1,179,742	—
Maine	246,515	—	46,690	—	364,632	—
Massachusetts	1,876,826	1,676,245	—	—	—	—
New Hampshire	242,819	—	33,404	—	164,392	—
Rhode Island	208,521	—	—	—	—	—
Vermont	143,194	—	30,362	—	230,116	—

TABLE 2.18 (continued)

TOTAL FAA AIR TRAFFIC ACTIVITY BY REGION AND STATE, AND BY FAA-OPERATED TOWERS,
AIR ROUTE TRAFFIC CONTROL CENTERS, FLIGHT SERVICE STATIONS AND INTERNATIONAL
FLIGHT SERVICE STATIONS
CALENDAR YEAR 1987

FAA Region and State	Airport Operations (Towers)	Aircraft Handled (Centers)	Aircraft Contacted		Flight Services	
			Flight Service Stations	Int'l Flight Service Sta.	Flight Service Stations	Int'l Flight Service Sta.
Northwest Mountain -						
Total	<u>5,150,505</u>	<u>3,641,632</u>	<u>923,806</u>	<u>0</u>	<u>3,938,296</u>	<u>0</u>
Colorado	1,396,724	1,309,314	154,719	—	831,927	—
Idaho	344,989	—	51,634	—	252,760	—
Montana	300,597	—	164,878	—	499,326	—
Oregon	825,487	—	117,073	—	575,969	—
Utah	399,704	1,084,550	70,989	—	344,141	—
Washington	1,756,628	1,247,768	255,090	—	1,089,626	—
Wyoming	126,376	—	109,423	—	344,547	—
Southern - Total	<u>11,103,898</u>	<u>7,563,525</u>	<u>1,082,442</u>	<u>314,694</u>	<u>9,749,332</u>	<u>1,434,844</u>
Alabama	657,717	—	133,154	—	1,035,126	—
Florida	4,760,292	3,297,089	283,438	215,840	2,757,204	1,153,244
Georgia	1,558,388	2,436,770	130,432	—	1,395,956	—
Kentucky	727,483	—	106,500	—	661,078	—
Mississippi	324,649	—	61,048	—	439,612	—
North Carolina	1,147,780	—	146,783	—	1,352,095	—
Puerto Rico	275,586	—	—	98,854	—	281,600
South Carolina	467,296	—	86,171	—	874,789	—
Tennessee	1,022,487	1,829,666	134,916	—	1,233,472	—
Virgin Islands	162,220	—	—	—	—	—
Southwest - Total	<u>6,635,419</u>	<u>4,915,635</u>	<u>729,425</u>	<u>0</u>	<u>5,699,061</u>	<u>0</u>
Arkansas	349,174	—	99,566	—	588,036	—
Louisiana	1,102,578	—	47,567	—	634,825	—
New Mexico	385,410	1,461,126	142,838	—	550,748	—
Oklahoma	790,410	—	93,874	—	769,692	—
Texas	4,007,847	3,454,509	345,580	—	3,155,760	—
Western-Pacific -						
Total	<u>12,997,337</u>	<u>4,071,258</u>	<u>1,042,954</u>	<u>0</u>	<u>5,391,596</u>	<u>0</u>
American Samoa	12,892	—	—	—	—	—
Arizona	1,780,816	—	138,250	—	684,882	—
California	9,620,451	3,517,848	748,743	—	3,958,895	—
Guam	—	49,627	—	—	—	—
Hawaii	884,380	503,783	81,457	—	361,241	—
Nevada	675,047	—	74,504	—	386,578	—
Wake Island	23,751	—	—	—	—	—

III. AIRPORTS

Information about U.S. civil and joint-use landing facilities (including airports, heliports, stolports, and seaplane bases) was furnished by the FAA Office of Airport Standards. This information was obtained through physical inspection and mail solicitations, and was reported on the Airport Master Record (Form FAA 5010-1) and FAA Landing Facilities Information Request on Airports, Heliports, Stolports, and Seaplane Bases (Forms 5010-2 and 5010-5).

TABLE 3.1
**TOTAL ALL FACILITIES
 ON RECORD WITH FAA**

1978 - 1987

Year	All Facilities ¹			Airports Only			
	Total	With Runway Lights	With Paved Runways	Total	With Runway Lights	With Paved Runways	Airports of Entry*
1978	14,574	4,567	5,484	12,006	4,331	4,219	70
1979	14,746	4,631	5,618	12,064	4,365	4,256	60
1980	15,161	4,738	5,833	12,240	4,443	4,306	69
1981	15,476	4,796	6,012	12,427	4,474	4,351	69
1982	15,831	4,842	6,224	12,596	4,494	4,391	63
1983	16,029	4,878	6,441	12,653	4,513	4,431	59
1984	16,079	4,889	6,531	12,648	4,536	4,450	59
1985	16,318	4,941	6,721	12,744	4,582	4,486	57
1986	16,582	4,954	6,948	12,785	4,601	4,499	76
1987	17,015	4,922	7,232	12,907	4,610	4,526	80

* Excludes landing rights airports.

1 All facilities include airports, heliports, seaplane bases, and seaplane bases.

TABLE 3.2

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
AND REPORTED ABANDONMENTS ON RECORD, BY FAA REGION AND STATE
DECEMBER 31, 1987

FAA Region and State	Total Aircraft Facilities	Airports	Heliports	Stolports	Seaplane Bases	Reported Abandonments During Year
Total	17,015	12,907	3,653	67	388	401
United States--Total¹	16,949	12,859	3,639	67	384	397
Alaskan--Total	593	466	21	---	106	24
Central--Total	1,437	1,268	161	3	5	37
Iowa	277	236	40	1	---	9
Kansas	389	366	22	1	---	7
Missouri	440	354	80	1	5	10
Nebraska	331	312	19	---	---	11
Eastern--Total	2,175	1,379	725	7	64	87
Delaware	35	21	14	---	---	3
District of Columbia	15	2	13	---	---	1
Maryland	154	109	43	1	1	7
New Jersey	317	116	186	---	15	6
New York	507	360	123	---	24	10
Pennsylvania	744	489	241	3	11	55
Virginia	308	221	81	3	3	4
West Virginia	95	61	24	---	10	1
Great Lakes--Total	4,135	3,445	587	11	92	98
Illinois	913	714	193	---	6	18
Indiana	530	441	83	2	4	18
Michigan	431	362	62	2	5	9
Minnesota	477	390	21	1	65	9
North Dakota	487	480	6	---	1	17
Ohio	716	525	187	4	---	12
South Dakota	158	150	7	1	---	10
Wisconsin	423	383	28	1	11	5
New England--Total	568	329	183	5	51	16
Connecticut	120	55	58	2	5	4
Maine	144	102	9	---	33	5
Massachusetts	158	75	73	1	9	5
New Hampshire	62	39	20	---	3	2
Rhode Island	22	12	9	---	1	---
Vermont	62	46	14	2	---	---

TABLE 3.2 (Continued)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
AND REPORTED ABANDONMENTS ON RECORD, BY FAA REGION AND STATE
DECEMBER 31, 1987

FAA Region and State	Total Aircraft Facilities	Airports	Heliports	Stolports	Seaplane Bases	Reported Abandonments During Year
Northwest Mountain--Total	1,737	1,355	353	10	19	25
Colorado	333	218	110	5	---	4
Idaho	207	182	21	---	4	3
Montana	210	189	19	1	1	2
Oregon	366	282	79	3	2	4
Utah	109	84	25	---	---	1
Washington	408	308	87	1	12	10
Wyoming	104	92	12	---	---	1
Southern--Total	2,165	1,665	457	18	25	35
Alabama	193	154	38	---	1	1
Florida	607	412	176	3	16	17
Georgia	334	256	74	4	---	2
Kentucky	139	112	27	---	---	4
Mississippi	194	172	22	---	---	---
North Carolina	316	269	43	3	1	4
Puerto Rico	27	17	9	---	1	4
South Carolina	146	128	17	---	1	---
Tennessee	201	143	48	8	2	3
Virgin Islands	8	2	3	---	3	---
Southwest--Total	2,818	2,104	693	7	14	53
Arkansas	173	157	16	---	---	---
Louisiana	381	196	173	---	12	13
New Mexico	174	157	16	---	1	2
Oklahoma	403	318	64	---	1	5
Texas	1,687	1,276	404	7	---	33
Western-Pacific--Total	1,387	896	473	6	12	26
Arizona	265	176	87	2	---	8
California	909	557	337	3	12	13
Hawaii	54	35	19	---	---	1
Nevada	128	99	28	1	---	4
South Pacific ²	31	29	2	---	---	---

1 Excludes Puerto Rico, Virgin Islands, and South Pacific.

2 American Samoa, Guam and Trust Territories.

TABLE 3.3

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
ON RECORD, BY TYPE OF OWNERSHIP
DECEMBER 31, 1987

FAA Region and State	Total Facilities	By Ownership		Paved Facilities		Unpaved Facilities	
		Private	Public	Lighted	Not Lighted	Lighted	Not Lighted
TOTAL	17,015	12,031	4,984	3,983	3,249	939	8,844
United States--Total ¹	16,949	12,013	3,960	3,960	3,230	938	8,821
Alaskan--Total	593	196	397	46	14	89	444
Central--Total	1,437	962	475	408	147	127	755
Iowa	277	155	122	100	32	52	93
Kansas	389	257	132	109	19	33	228
Missouri	440	314	126	121	72	24	223
Nebraska	331	236	95	78	24	18	211
Eastern--Total	2,175	1,838	337	418	478	115	1,164
Delaware	35	31	4	7	7	6	15
District of Columbia	15	8	7	5	7	---	3
Maryland	154	133	21	36	31	9	78
New Jersey	317	276	41	45	85	16	171
New York	507	423	84	98	104	37	268
Pennsylvania	744	666	78	117	161	35	431
Virginia	308	234	74	78	61	11	158
West Virginia	95	67	28	32	22	1	40
Great Lakes--Total	4,135	3,244	891	790	425	319	2,601
Illinois	913	803	110	114	119	59	621
Indiana	530	444	86	89	56	34	349
Michigan	431	297	134	125	50	45	211
Minnesota	477	330	147	101	49	38	319
North Dakota	487	388	99	65	40	32	380
Ohio	716	582	134	143	129	52	392
South Dakota	158	83	75	48	6	27	75
Wisconsin	423	317	106	105	32	32	254
New England--Total	568	430	138	128	151	9	280
Connecticut	120	104	16	27	43	2	48
Maine	144	99	45	29	15	2	98
Massachusetts	158	125	33	39	58	3	58
New Hampshire	62	47	15	17	19	2	24
Rhode Island	22	13	9	7	8	---	7
Vermont	62	42	20	9	8	---	45

TABLE 3.3 (Continued)

**U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
ON RECORD, BY TYPE OF OWNERSHIP
DECEMBER 31, 1987**

FAA Region and State	Total Facilities	By Ownership		Paved Facilities		Unpaved Facilities	
		Private	Public	Lighted	Not Lighted	Lighted	Not Lighted
Northwest Mountain--Total	1,737	1,060	677	438	336	86	877
Colorado	333	237	96	82	81	17	153
Idaho	207	79	128	41	31	1	134
Montana	210	89	121	67	25	15	103
Oregon	366	267	99	69	78	16	203
Utah	109	52	57	41	28	2	38
Washington	408	281	127	105	79	32	192
Wyoming	104	55	49	33	14	3	54
Southern--Total	2,165	1,381	784	686	417	100	962
Alabama	193	93	100	90	40	8	55
Florida	607	469	138	124	137	30	316
Georgia	334	205	129	106	68	13	147
Kentucky	139	71	68	57	33	3	46
Mississippi	194	108	86	73	30	9	82
North Carolina	316	221	95	92	38	19	167
Puerto Rico	27	13	14	10	13	---	4
South Carolina	146	81	65	54	16	9	67
Tennessee	201	118	83	78	41	8	74
Virgin Islands	8	2	6	2	1	1	4
Southwest--Total	2,818	2,051	767	699	743	73	1,303
Arkansas	173	84	89	78	30	4	61
Louisiana	381	286	95	75	142	4	160
New Mexico	174	99	75	51	28	3	92
Oklahoma	403	240	163	121	84	15	183
Texas	1,687	1,342	345	374	459	47	807
Western-Pacific--Total	1,387	869	518	370	538	21	458
Arizona	265	173	92	64	85	3	113
California	909	593	316	255	387	14	253
Hawaii	54	36	18	12	30	1	11
Nevada	128	64	64	28	31	3	66
South Pacific ²	31	3	28	11	5	---	15

¹ Excludes Puerto Rico, Virgin Islands, and South Pacific.

² American Samoa, Guam and Trust Territories.

TABLE 3.4

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD, BY LENGTH OF LONGEST RUNWAY, BY FAA REGION AND STATE
DECEMBER 31, 1987

FAA Region and State	Total	Under 3000	3000-3999	4000-4999	5000-5999	6000-6999	7000-7999	8000-8999	9000-9999	10,000-Over
TOTAL	17,015	11,347	2,667	1,200	666	334	178	121	67	235
U.S.--Total¹	16,949	11,316	2,659	1,196	861	327	173	120	65	232
Alaskan--Total	593	315	75	54	57	21	10	6	5	50
Central--Total	1,437	1,015	251	87	36	17	12	6	3	10
Iowa	277	185	48	31	4	5	1	2	1	---
Kansas	389	275	67	21	15	2	6	---	---	3
Missouri	440	325	74	14	10	6	3	1	1	6
Nebraska	331	230	62	21	7	4	2	3	1	1
Eastern--Total	2,175	1,755	189	66	78	29	16	8	10	24
Delaware	35	27	4	2	1	---	1	---	---	---
District of Columbia	15	13	---	---	---	1	---	---	---	1
Maryland	154	127	14	6	4	---	1	1	1	---
New Jersey	317	268	24	5	10	2	3	1	1	3
New York	507	387	51	14	18	10	4	2	4	17
Pennsylvania	744	647	44	17	17	7	5	1	3	3
Virginia	308	231	37	17	14	5	---	3	1	---
West Virginia	95	55	15	5	14	4	2	---	---	---
Great Lakes--Total	4,135	3,108	558	190	116	60	28	24	9	42
Illinois	913	801	59	20	14	9	3	4	1	2
Indiana	530	423	58	19	16	4	2	1	1	6
Michigan	431	287	73	27	20	11	5	1	1	6
Minnesota	477	284	83	32	27	15	9	6	---	21
N. Dakota	487	380	76	19	5	3	2	1	1	---
Ohio	716	555	91	36	18	6	2	3	3	2
S. Dakota	158	78	51	16	5	5	1	2	---	---
Wisconsin	423	300	67	21	11	7	4	6	2	5
New England--Total	568	408	52	30	36	10	9	3	2	16
Connecticut	120	102	5	6	4	---	1	---	1	1
Maine	144	76	18	13	13	5	3	2	---	14
Massachusetts	158	118	17	5	11	3	1	1	1	1
New Hampshire	62	45	6	2	6	2	1	---	---	---
Rhode Island	22	16	1	2	1	---	2	---	---	---
Vermont	62	51	5	2	3	---	1	---	---	---

TABLE 3.4 (continued)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD, BY LENGTH OF LONGEST RUNWAY, BY FAA REGION AND STATE
DECEMBER 31, 1987

FAA Region and State	Total	Under 3000	3000-3999	4000-4999	5000-5999	6000-6999	7000-7999	ECCC-8999	9000-9999	10,000-Over
Northwest Mountain--										
Total	<u>1,737</u>	<u>1,006</u>	<u>304</u>	<u>182</u>	<u>121</u>	<u>45</u>	<u>23</u>	<u>14</u>	<u>16</u>	<u>26</u>
Colorado	333	183	54	40	26	10	5	5	4	6
Idaho	207	105	48	34	10	2	1	1	3	3
Montana	210	78	73	33	15	1	---	2	4	4
Oregon	366	272	43	19	21	7	1	1	---	2
Utah	109	31	18	23	19	9	5	2	1	1
Washington	408	305	49	15	19	5	4	---	3	8
Wyoming	104	32	19	18	11	11	7	3	1	2
Southern--Total	<u>2,165</u>	<u>1,241</u>	<u>447</u>	<u>204</u>	<u>147</u>	<u>41</u>	<u>26</u>	<u>28</u>	<u>8</u>	<u>23</u>
Alabama	193	97	36	30	13	6	2	5	2	2
Florida	607	370	110	48	33	12	12	10	1	11
Georgia	334	197	74	23	30	5	---	3	1	1
Kentucky	139	88	15	17	12	4	1	---	1	1
Mississippi	194	89	70	16	9	4	1	4	1	---
N. Carolina	316	194	65	31	12	4	5	1	---	4
Puerto Rico	27	16	4	2	2	1	---	---	---	2
S. Carolina	146	73	40	11	17	2	1	2	---	---
Tennessee	201	113	33	26	18	3	2	3	2	1
Virgin Islands	8	4	---	---	1	---	2	---	---	1
Southwest--Total	<u>2,818</u>	<u>1,651</u>	<u>580</u>	<u>260</u>	<u>189</u>	<u>59</u>	<u>32</u>	<u>18</u>	<u>6</u>	<u>23</u>
Arkansas	173	78	47	22	16	8	1	1	---	---
Louisiana	381	266	65	15	16	6	2	2	1	8
New Mexico	174	44	29	32	39	11	10	5	---	4
Oklahoma	403	264	82	26	17	6	3	1	1	3
Texas	1,687	999	357	165	101	28	16	9	4	8
Western-Pacific--	<u>1,387</u>	<u>848</u>	<u>211</u>	<u>127</u>	<u>84</u>	<u>52</u>	<u>22</u>	<u>14</u>	<u>8</u>	<u>21</u>
Total										
Arizona	265	140	39	44	18	12	5	5	---	2
California	909	610	146	59	38	22	9	6	4	15
Hawaii	54	41	4	2	2	3	---	---	1	1
Nevada	128	46	18	20	24	9	5	2	1	3
South Pacific ²	31	11	4	2	2	6	3	1	2	---

1 Excludes Puerto Rico, Virgin Islands, and South Pacific.

2 American Samoa, Guam, and Trust Territories.

TABLE 3.5

**U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD, BY FAA REGION AND STATE AND OTHER AREAS
DECEMBER 31, 1978 - 1987**

FAA Region and State	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
TOTAL	14,574	14,746	15,161	15,476	15,631	16,029	16,079	16,318	16,582	17,015
United States--Total ¹	14,525	14,693	15,107	15,422	15,778	15,966	16,013	16,252	16,516	16,949
Alaskan--Total	756	734	731	689	666	615	609	610	614	593
Central--Total	1,322	1,325	1,340	1,373	1,379	1,430	1,437	1,421	1,437	
Iowa	257	258	267	270	273	280	282	278	279	277
Kansas	372	374	377	376	377	380	384	385	382	389
Missouri	371	374	377	393	398	419	423	437	429	440
Nebraska	322	319	319	334	331	346	341	337	331	331
Eastern--Total	1,976	1,961	1,971	2,003	2,011	2,051	2,048	2,076	2,134	2,175
Delaware	32	35	36	37	35	37	36	36	37	35
District of Columbia	17	18	18	16	16	16	15	15	15	15
Maryland	148	144	150	145	147	147	149	151	155	154
New Jersey	263	266	265	271	280	291	294	295	286	317
New York	498	462	471	486	486	476	480	485	495	507
Pennsylvania	692	684	694	698	696	720	708	719	755	744
Virginia	255	256	260	260	262	270	274	282	299	308
West Virginia	71	76	77	90	89	94	92	93	92	95
Great Lakes--Total	3,370	3,439	3,641	3,813	4,023	4,031	4,027	4,060	4,071	4,135
Illinois	901	891	942	929	908	909	901	888	894	913
Indiana	317	325	347	365	490	498	495	523	518	530
Michigan	418	413	419	417	421	422	427	422	419	431
Minnesota	420	468	491	493	498	492	480	479	472	477
North Dakota	217	221	229	365	442	451	457	484	499	487
Ohio	584	586	652	674	681	678	689	690	697	716
South Dakota	142	153	159	162	163	165	165	164	161	158
Wisconsin	371	382	402	408	420	416	413	410	411	423
New England--Total	540	536	542	534	521	513	509	515	536	568
Connecticut	104	106	108	105	105	105	104	108	112	120
Maine	157	160	162	158	147	146	143	144	144	144
Massachusetts	140	137	138	136	134	130	130	131	141	158
New Hampshire	55	52	52	52	54	54	54	53	58	62
Rhode Island	23	20	18	18	18	18	18	18	20	22
Vermont	61	61	64	65	63	60	60	61	61	62

TABLE 3.5 (continued)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD, BY FAA REGION AND STATE AND OTHER AREAS
DECEMBER 31, 1978 - 1987

FAA Region and State	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Northwest Mountain--Total	1,490	1,542	1,593	1,586	1,619	1,636	1,626	1,662	1,685	1,737
Colorado	272	301	307	312	326	321	315	321	323	333
Idaho	190	194	197	196	197	196	198	202	205	207
Montana	172	177	185	190	191	197	194	200	203	210
Oregon	302	308	323	318	332	341	336	342	351	366
Utah	95	100	104	102	96	95	97	101	105	109
Washington	365	365	371	363	372	382	385	395	396	408
Wyoming	94	97	106	105	105	104	101	101	102	104
Southern--Total	1,719	1,765	1,851	1,895	1,919	1,947	1,961	2,002	2,099	2,165
Alabama	147	156	163	165	167	169	173	174	183	193
Florida	454	458	485	506	529	541	542	557	594	607
Georgia	278	283	288	293	295	302	301	304	325	334
Kentucky	101	112	128	125	127	127	129	134	139	139
Mississippi	160	165	171	180	180	181	180	188	190	194
North Carolina	270	271	285	286	280	284	288	292	307	316
Puerto Rico	27	32	32	33	32	31	31	31	30	27
South Carolina	126	127	132	137	135	137	139	139	137	146
Tennessee	150	155	160	164	168	169	171	176	186	201
Virgin Islands	5	6	7	6	6	6	7	7	8	8
Southwest--Total	2,227	2,227	2,263	2,333	2,425	2,506	2,541	2,624	2,661	2,618
Arkansas	167	167	156	157	157	160	156	163	167	173
Louisiana	291	291	289	292	303	311	317	353	357	381
New Mexico	145	145	149	156	159	160	167	169	168	174
Oklahoma	292	292	294	297	322	332	335	336	341	403
Texas	1,332	1,332	1,375	1,431	1,484	1,543	1,566	1,603	1,628	1,687
Western-Pacific--Total	1,220	1,217	1,229	1,250	1,268	1,305	1,328	1,332	1,361	1,387
Arizona	210	210	216	224	233	240	244	246	262	265
California	819	819	825	832	843	862	881	887	895	909
Hawaii	54	54	50	51	49	51	51	50	51	54
Nevada	119	119	123	128	128	126	124	121	125	128
South Pacific ²	12	11	15	15	15	26	28	28	28	31

¹ Excludes Puerto Rico, Virgin Islands, and South Pacific.

² American Samoa, Guam, and Trust Territories.

TABLE 3.6
AIRPORT IMPROVEMENT PROGRAM: FISCAL YEAR 1986
(EXCLUDES AMENDMENT TO GRANTS)
(Thousands of Dollars)

FAA REGION and STATE	Primary		Commercial		Reliever		General Aviation		System Planning	
	Total Federal Funds	Total Projects								
Southern--										
Total	<u>103,957.1</u>	<u>84</u>	<u>5,456.0</u>	<u>25</u>	<u>14,600.0</u>	<u>22</u>	<u>22,721.1</u>	<u>95</u>	<u>743.7</u>	<u>4</u>
Alabama	3,023.0	10	153.7	3	45.9	1	2,262.0	13	---	---
Florida	36,953.0	28	2,382.4	5	2,611.6	9	4,833.3	23	---	---
Georgia	23,564.7	11	227.3	2	11,165.1	9	2,035.1	15	275.0	2
Kentucky	9,503.9	6	165.5	1	241.8	2	1,609.5	11	---	---
Mississippi	2,998.5	4	527.2	4	---	---	1,626.3	10	---	---
N. Carolina	13,606.8	11	1,216.6	6	---	---	3,740.6	6	---	---
Puerto Rico	---	---	---	---	---	---	3,234.5	1	---	---
S. Carolina	3,568.2	5	783.3	4	535.6	1	2,636.4	14	169.0	1
Tennessee	9,061.5	7	---	---	---	---	743.4	2	299.7	1
Virgin Island	1,677.5	2	---	---	---	---	---	---	---	---
Southwest--										
Total	<u>58,132.4</u>	<u>39</u>	<u>6,587.1</u>	<u>9</u>	<u>20,396.2</u>	<u>20</u>	<u>23,223.5</u>	<u>52</u>	<u>719.6</u>	<u>8</u>
Arkansas	2,020.7	4	565.9	2	486.0	1	1,537.5	7	135.0	1
Louisiana	5,080.3	6	---	---	1,645.1	3	3,970.7	8	71.0	2
New Mexico	437.5	1	4,799.0	2	---	---	2,851.1	3	---	---
Oklahoma	3,599.8	5	50.0	1	1,972.7	3	2,889.4	9	223.4	2
Texas	46,994.1	23	1,172.2	4	16,292.4	13	11,974.8	25	290.2	3
Western-Pacific--										
Total	<u>94,338.8</u>	<u>47</u>	<u>8,288.1</u>	<u>21</u>	<u>27,336.8</u>	<u>18</u>	<u>15,919.0</u>	<u>42</u>	<u>676.3</u>	<u>5</u>
Arizona	13,650.2	7	1,532.4	7	5,561.1	5	2,907.1	10	137.0	1
California	55,846.2	29	5,694.5	11	6,683.8	11	9,910.9	25	354.6	2
Hawaii	15,836.2	5	---	---	---	---	---	---	90.0	1
Nevada	7,637.7	3	361.2	1	15,091.9	2	2,666.3	6	---	---
South Pacific ²	1,368.5	3	700.0	2	---	---	434.7	1	124.7	1

1 Excludes Puerto Rico, Virgin Islands, and South Pacific.

2 American Samoa, Guam, North Mariana and Trust Territories.

TABLE 3.6 (Continued)

AIRPORT IMPROVEMENT PROGRAM: FISCAL YEAR 1986
(EXCLUDES AMENDMENT TO GRANTS)
(Thousands of Dollars)

FAA REGION and STATE	Primary		Commercial		Reliever		General Aviation		System Planning	
	Total Federal Funds	Total Projects								
Great Lakes--										
Total	<u>89,507.2</u>	<u>60</u>	<u>16,337.5</u>	<u>27</u>	<u>30,750.9</u>	<u>24</u>	<u>22,509.9</u>	<u>48</u>	<u>2,072.1</u>	<u>10</u>
Illinois	25,162.9	12	2,307.9	5	11,139.6	6	3,989.4	15	821.3	3
Indiana	6,789.9	6	6,761.0	7	4,649.4	6	2,276.8	5	472.3	2
Michigan	17,707.6	15	430.7	3	3,634.2	2	4,493.7	5	---	---
Minnesota	3,938.9	3	245.0	1	2,692.0	2	2,455.1	2	498.6	2
N. Dakota	2,225.9	5	176.7	1	---	---	1,267.3	2	112.5	1
Ohio	23,656.6	9	2,000.0	1	5,460.0	3	4,074.3	6	---	---
S. Dakota	2,532.0	3	1,809.0	5	---	---	1,415.7	9	111.6	1
Wisconsin	7,493.4	7	2,607.2	4	3,175.7	5	2,517.6	4	55.8	1
New England--										
Total	<u>19,375.3</u>	<u>27</u>	<u>3,965.7</u>	<u>12</u>	<u>3,946.4</u>	<u>13</u>	<u>3,984.2</u>	<u>18</u>	<u>264.1</u>	<u>2</u>
Connecticut	3,366.7	7	---	---	132.9	1	831.6	2	---	---
Maine	4,055.3	4	1,160.2	5	---	---	890.1	4	---	---
Massachusetts	6,686.0	9	1,731.4	2	1,495.8	7	947.5	9	100.3	1
New Hampshire	301.1	2	403.3	4	849.4	2	---	---	163.8	1
Rhode Island	3,916.4	3	---	---	1,468.3	3	862.3	1	---	---
Vermont	1,049.8	2	670.8	1	---	---	452.7	2	---	---
Northwest Mountain--										
Total	<u>51,496.7</u>	<u>40</u>	<u>10,226.9</u>	<u>21</u>	<u>11,050.1</u>	<u>21</u>	<u>16,177.8</u>	<u>52</u>	<u>1,077.9</u>	<u>12</u>
Colorado	14,951.6	6	2,966.0	6	6,318.6	10	2,482.9	5	275.3	4
Idaho	2,489.5	3	889.0	3	1,219.0	1	1,803.9	6	22.5	1
Montana	4,800.6	11	65.0	1	---	---	2,602.3	9	75.0	1
Oregon	6,718.7	4	3,779.0	3	1,120.0	2	3,657.5	7	180.0	1
Utah	9,567.2	6	170.0	1	189.0	2	1,750.9	5	167.3	2
Washington	10,441.9	7	837.9	3	2,203.5	6	2,070.1	11	317.1	2
Wyoming	2,527.2	3	1,520.0	4	---	---	1,810.2	9	40.7	1

TABLE 3.6 (Continued)
 AIRPORT IMPROVEMENT PROGRAM: FISCAL YEAR 1986
 (EXCLUDES AMENDMENT TO GRANTS)
 (Thousands of Dollars)

FAA REGION and STATE	Primary		Commercial		Reliever		General Aviation		System Planning	
	Total Federal Funds	Total Projects								
TOTAL	545,193.3	387	74,720.0	160	133,495.5	157	158,018.7	409	8,009.2	60
U. S.--Total ¹	542,147.5	383	74,020.0	158	133,495.5	157	154,349.5	407	7,884.5	59
Alaskan--Total	6,697.9	9	10,829.8	11	---	---	26,154.4	18	---	---
Central--Total	29,005.1	18	4,417.0	13	7,776.3	9	12,035.9	30	422.4	3
Iowa	4,313.8	7	757.8	3	172.4	1	4,034.6	7	---	---
Kansas	5,390.0	1	2,306.8	4	379.4	2	2,712.7	8	29.0	1
Missouri	16,010.3	6	456.6	1	6,654.8	5	3,251.5	8	393.4	2
Nebraska	3,291.0	4	895.8	5	569.7	1	2,037.1	7	---	---
Eastern--Total	92,682.5	63	8,611.8	21	17,639.1	30	15,292.8	54	2,032.9	16
Delaware	---	---	180.0	1	483.2	1	---	---	81.0	1
District of Columbia	---	---	---	---	---	---	---	---	203.3	1
Maryland	17,827.5	5	1,064.7	1	5,146.6	5	1,328.3	4	170.9	1
New Jersey	15,283.9	5	961.0	2	3,012.9	3	1,210.0	3	225.0	1
New York	34,159.8	27	2,577.0	8	1,513.9	5	5,185.9	14	554.9	8
Pennsylvania	13,846.8	13	2,086.4	5	4,855.6	11	3,693.0	14	606.8	3
Virginia	9,647.4	9	955.0	2	2,626.9	5	2,927.2	11	191.0	1
West Virginia	1,917.1	4	785.7	2	---	---	948.4	8	---	---

IV. AIRPORT ACTIVITY OF CERTIFIED ROUTE AIR CARRIERS

The data presented in this chapter were obtained from information reported quarterly to the Department of Transportation's Research and Special Programs Administration (RSPA) by the large scheduled certificated air carriers on Schedules T-3(a)(b)(c), RSPA Form 41, Uniform System of Accounts and Reports for Large Certificated Air Carriers. These statistics summarize domestic and international, scheduled and non scheduled service revenue; passenger enplanements; aircraft departures; and tons of freight, express, and mail enplaned at certificated points in the 50 States, the District of Columbia, other U.S. areas, and foreign countries served by the carriers.

This chapter covers only the large scheduled certificated air carriers;* and thus excludes the charter only, small certificated, commuter, intrastate and foreign-flag air carriers. Note that this chapter covers only a subset of the carriers covered by Chapter VI--U.S. Certificated Air Carriers--Operating Data.

The activity information in Tables 4.5-4.9 is presented by "hubs". Air traffic hubs are not airports; they are the cities or twin cities requiring aviation services. The hubs constitute a primary focal point for the transportation research programs of the FAA, and the analyses of individual cities within an area are treated in relationship to the entire area.

* Large Certificated Air Carrier--carrier holding a certificate issued under Section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum passenger seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds or conducting international operations.

Individual communities fall into four hub classifications as determined by each community's percentage of the total enplaned revenue passengers in all services and all operations of U.S. certificated route air carriers within the 50 States, the District of Columbia, and other U.S. areas. Classifications in this issues are based on 426,816,045 total enplaned revenue passengers.

The percentage and number of enplaned passengers in the hub classifications for 12 months ending December 31, 1987 are:

<u>Hub Classification</u>	<u>Percentage of Total Enplaned Passengers</u>	<u>Number of Enplaned Passengers</u>
Large (L)	1.00 or more	4,268,130 or more
Medium (M)	0.25 to 0.99	1,067,040 to 4,268,159
Small (S)	0.05 to 0.24	213,408 to 1,067,039
Nonhub (N)	less than 0.05	less than 213,408

For the 12-month period ending December 31, 1987, there were 125 air traffic hubs. These hubs represented 26.2 percent of the 477 air traffic hubs and non hubs in the 50 States, the District of Columbia, and other U.S. areas receiving air carrier service during the period. The dominance of the hubs in the air traffic patterns is brought out by the fact that of the 426,816,045 passenger enplanements during the period, 97.7 percent (416,988,710) were recorded at the 125 hubs, while the non hubs accounted for only 2.3 percent (9,827,335). Of the 97.7 percent of the passenger enplanements recorded at the hubs, the 28 large hubs accounted for 74.1 percent, the 34 medium hubs accounted for 16.6 percent, and the 63 small hubs accounted for 7.1 percent.

AIR TRAFFIC HUBS

December 31, 1987

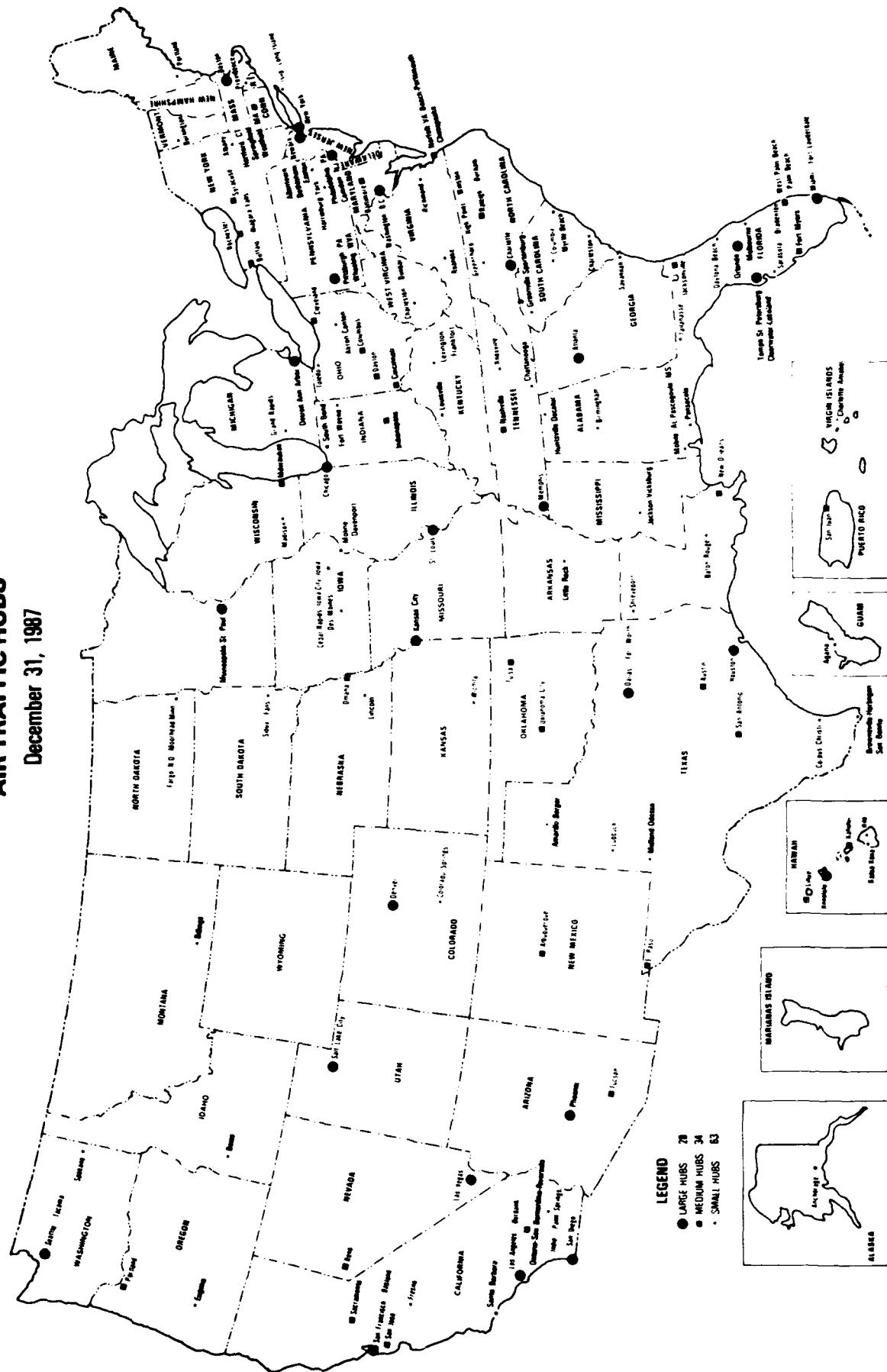


TABLE 4.1

LARGE SCHEDULED CERTIFICATED AIR CARRIERS
AS OF DECEMBER 31, 1987

Aerial Transit	MGM Grand
Air America	Mid Pacific Airlines
Air California	Midway Airlines
Air Wisconsin	Midwest Express Airlines
Alaska Airlines	Northern Air Cargo
Aloha Airlines	Northwest Airlines
America West Airlines	Pacific Southwest Airlines
American Airlines	Pan American World Airways
American Trans Air	People Express Airlines
Arrow Air	Piedmont Aviation
Aspen Airways	Presidential Airways
Braniiff	Reeve Aleutian Airways
Britt Airways	Rosenbaum
Challenge Air Transport	Southwest Airlines
Continental Air Lines	Suncoast
Delta Air Lines	Sunworld International
Eastern Air Lines	Airlines
Federal Express	Tower Air
Florida Express	Transstar Airline
Flying Tiger Line	Trans World Airlines
Hawaiian Airlines	United Air Lines
Horizon Air	U.S. Air
Jet America Airlines	Western Air Lines
Markair	Zantop International Airlines

TABLE 4.2*
 AMERICAN FLAG AIRLINE TRAFFIC ENPLANED--SYSTEM TOTAL
 LARGE SCHEDULED CERTIFICATED AIR CARRIERS
 SCHEDULED AND NONSCHEDULED OPERATIONS
 1978 - 1987

Year	Enplaned Passengers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	Inter- national			
1978	277,583,574	256,088,655	21,494,919	5,047,882	1,106,885.2	3,689,742.4
1979	314,456,936	289,902,853	24,554,083	5,307,981	1,131,534.5	3,584,251.1
1980	296,860,910	272,786,428	24,074,482	5,332,898	1,583,114.3	3,979,762.0
1981	281,379,313	260,937,062	20,442,251	5,136,293	1,220,857.0	3,158,342.5
1982	292,538,822	272,449,376	19,789,450	4,921,628	1,247,351.2	2,951,619.9
1983	319,886,291	297,484,708	22,401,583	5,043,040	1,293,103.6	3,219,495.8
1984	344,831,718	321,136,409	23,695,309	5,449,541	1,389,154.7	3,579,216.1
1985	381,108,118	356,103,027	25,005,091	5,696,217	1,486,900.6	3,415,759.7
1986	418,563,577	393,267,550	25,295,582	6,401,599	2,066,173.6	4,718,544.1
1987	448,913,726	417,869,993	31,043,733	6,640,400	1,621,734.2	5,073,264.9

* Includes operations of certificated all-cargo carriers.

Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.3*
 AMERICAN FLAG AIRLINE TRAFFIC ENPLANED--50 STATES
 LARGE SCHEDULED CERTIFIED AIR CARRIERS
 SCHEDULED AND NONSCHEDULED OPERATIONS
 1978 - 1987

Year	Enplaned Passengers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1978	261,313,500	253,397,340	7,916,160	4,844,426	1,043,564.5	3,244,108.8
1979	296,132,661	286,980,624	9,252,037	5,094,736	1,071,071.8	3,122,796.4
1980	278,957,991	269,585,572	9,372,419	5,131,204	1,520,132.5	3,504,028.3
1981	263,684,851	256,007,148	7,677,703	4,940,700	1,160,808.6	2,643,964.8
1982	275,540,455	268,118,227	7,422,228	4,716,900	1,185,857.7	2,389,304.9
1983	301,347,773	292,962,603	8,385,170	4,825,467	1,227,581.1	2,558,106.8
1984	325,233,918	316,280,548	8,953,370	5,232,782	1,310,016.9	2,749,633.9
1985	360,710,517	351,346,625	9,363,892	5,476,633	1,416,643.1	2,548,025.1
1986	396,961,967	387,599,481	9,362,486	6,153,247	1,980,248.3	3,728,296.2
1987	422,747,715	411,311,165	11,436,550	6,372,793	1,534,719.8	3,948,060.7

* Includes operations of certificated all-cargo carriers.

Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.4*
 AMERICAN FLAG AIRLINE TRAFFIC ENPLANED--U.S. TERRITORIES
 LARGE SCHEDULED CERTIFIED AIR CARRIERS
 SCHEDULED AND NONSCHEDULED OPERATIONS
 1978 - 1987

Year	Enplaned Passengers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	International			
1978	2,713,246	---	2,713,246	29,040	5,919.4	59,188.7
1979	2,901,802	3,240	2,898,562	31,388	5,660.7	60,788.1
1980	2,450,861	454	2,450,407	25,644	5,992.8	58,159.1
1981	2,221,106	1,807,670	413,436	21,080	6,135.3	56,561.2
1982	2,210,575	1,718,635	491,940	28,414	5,770.7	56,612.0
1983	2,372,861	1,788,115	584,746	34,942	6,035.8	68,088.1
1984	2,537,084	1,888,024	649,060	34,196	6,746.3	69,167.6
1985	2,630,980	1,940,298	690,682	29,026	6,799.9	53,001.9
1986	3,046,033	2,249,694	796,339	38,960	6,856.5	62,206.8
1987	4,068,330	2,940,763	1,127,567	39,690	7,389.6	66,511.0

* Includes operations of certificated all-cargo carriers.

Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.5*
 AMERICAN FLAG AIRLINE TRAFFIC ENPLANED--FOREIGN COUNTRIES
 LARGE SCHEDULED CERTIFICATED AIR CARRIERS
 SCHEDULED AND NONSCHEDULED OPERATIONS
 1978 - 1987

Year	Enplaned Passengers			Air Carrier Aircraft Departures	Tons of Enplaned Mail	Tons of Enplaned Cargo
	Total	Domestic	Inter- national			
1978	13,556,828	2,691,315	10,865,513	174,416	57,401.5	386,444.9
1979	15,422,473	3,018,989	12,403,484	181,857	54,902.0	400,667.0
1980	15,452,058	3,200,402	12,251,656	176,050	56,989.0	417,574.6
1981	15,473,356	3,122,244	12,351,112	174,513	53,913.1	457,816.5
1982	14,787,796	2,912,514	11,875,282	176,314	55,722.8	505,703.0
1983	16,165,657	2,733,990	13,431,667	182,631	59,486.7	593,300.9
1984	17,060,716	2,967,837	14,092,879	182,533	72,391.5	760,414.6
1985	17,766,621	2,816,104	14,950,517	190,558	63,477.6	814,732.7
1986	18,555,577	3,418,820	15,136,757	209,392	78,068.8	928,041.1
1987	22,097,681	3,618,065	18,479,616	227,917	79,624.7	1,058,693.2

* Includes operations of certificated all-cargo carriers.

Source: RSPA-FAA Airport Activity Statistics of Certificated Route Air Carriers.

TABLE 4.6

SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons					Foreign mail	
	Total performed	Scheduled	Scheduled completed	Enplaned passenger		Freight	Express	U.S. Mail		
				5	6					
MAJORS	2	3	4							
AMERICAN DOMESTIC	631048 176	645535 631224	630337 52134808	52117318 17490	200275.70 200275			123713.54 50.00	4342.22 4342.22	
INTERNATIONAL	32548 30	32958 32958	32459 32459	3455905 3643	48198.75 48198.75			7593.16 400.00	72.56 72.56	
TOTAL	683596 208	671493 663802	662796 662796	55573223 55594356	248474.45 248474.45			131306.70 450.00	4414.78 4414.78	
CONTINENTAL	527932 775	537714 537714	517349 517349	37318028 104948	123490.22 123490	820.09 820.09		80679.53 80679	410.29 410.29	
INTERNATIONAL	26694 10	26448 26704	26160 26160	2862324 2862324	58951.39 351	103.01 103.01		5271.34 5271.34	10.29 10.29	
TOTAL	554626 785	564162 564162	543509 543509	40180352 105299	132441.61 182441.61	923.10 923.10		85950.87 85950.87	420.58 420.58	
DELTA DOMESTIC	718697 569	724319 724319	717738 717736	52397928 28637	264410.40 264410.40			250221.70 250221.70	526.50 526.50	
INTERNATIONAL	13989 3	14034 13992	13942 13942	1698906 680	21440.51 21440.51			1437.63 1437.63	704.77 704.77	
TOTAL	736886 572	736353 736353	731678 54124151	54098834 285650.91	27317 285650.91			251859.33 251859.33	705.81 705.81	
EASTERN DOMESTIC	493355 383	503390 503390	485572 485572	41284887 422609	149295.75 149295.75			177387.95 177387.95	2368.38 2368.38	
INTERNATIONAL	34557 107	35096 34864	34157 35096	3372043 337694	39382.88 39382.88			3160.07 3160.07	102.98 102.98	
TOTAL	527912 490	534486 534486	519729 519729	44638930 30260	188558.63 188558.63			180528.02 180528.02	2471.34 2471.34	
									.33	

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group	Air Carrier	Type of Operation	Type of Service	Aircraft departures			Enplaned revenue tons				Foreign mail	
				Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	
			1	2	3	4	5	6	7	8	9	10
FEDERAL EXPRESS		SCHEDULED	DOMESTIC	140624	140625	140635		1204214.10				
		NONSCHEDULED	ALL SERVICES	286	140910	140625	140635	6974.27				
INTERNATIONAL		SCHEDULED	DOMESTIC	7793	7793	7793		32838.50				
		NONSCHEDULED	ALL SERVICES	66	7859	7793	7793	3213.70				
TOTAL		SCHEDULED	DOMESTIC	148417	148418	148428		1237052.60				
		NONSCHEDULED	ALL SERVICES	352	148769	148418	148428	10187.97				
FLYING TIGER		SCHEDULED	DOMESTIC	16408	18142	15774		554957.69				
		NONSCHEDULED	ALL SERVICES	33	16441	18142	15774	1591.60				
INTERNATIONAL		SCHEDULED	DOMESTIC	8764	8231	7678		558649.29				
		NONSCHEDULED	ALL SERVICES	28	8792	8231	7678	621432.49				
TOTAL		SCHEDULED	DOMESTIC	25172	26373	23452		2005.76				
		NONSCHEDULED	ALL SERVICES	61	25233	26373	23452	623438.25				
NORTHWEST		SCHEDULED	DOMESTIC	497288	510173	494822		1176390.18				
		NONSCHEDULED	ALL SERVICES	74	497362	510173	494822	3897.36				
INTERNATIONAL		SCHEDULED	DOMESTIC	19937	19991	19548		1180087.54				
		NONSCHEDULED	ALL SERVICES	139	20076	19991	19548	33526833	225036.83			
TOTAL		SCHEDULED	DOMESTIC	517225	530164	514370		9772	126.05			
		NONSCHEDULED	ALL SERVICES	213	517438	530164	514370	2359.68	2233.63			
PAN AMERICAN		SCHEDULED	DOMESTIC	62847	84133	62328		438889.08				
		NONSCHEDULED	ALL SERVICES	60	62907	64133	62328	24049	216085.88			
INTERNATIONAL		SCHEDULED	DOMESTIC	80519	81636	79369		2134326	42043.13			
		NONSCHEDULED	ALL SERVICES	907	81426	81636	79369	441248.76	179696.10			
TOTAL		SCHEDULED	DOMESTIC	143366	145769	141697		3720049	179366.10			
		NONSCHEDULED	ALL SERVICES	967	144333	145769	141697	37270731	197338.03			
									159049.78			
									119973			
									159444.19			
									159790.00			
									12774.1			
									15013770			
									198076.25			

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group	Air Carrier	Type of Operation	Aircraft departures			Enplaned passengers			Enplaned revenue tons		
			Total performed	Scheduled	Completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	
										8	9
1	2	3	4	5	6	7	8	9	10		
PIEDMONT DOMESTIC	450446	458298	449337	25248921	52849.03					53039.44	
	383	458298	449337	8671	52849.03					53039.44	
	450829	554	334	2525592	1183.15					15.94	
INTERNATIONAL	554			58585							
TOTAL	451000	458852	449671	25305506	54132.18					53055.38	
	383	458852	449671	8671	54132.18					53055.38	
	451383			25314177							
TRANS. WORLD DOMESTIC	290888	296325	288580	21445214	104120.31					122980.49	1034.36
	1599	292267	288580	78143	138.40					122980.49	1034.36
				21523357	104258.71						
INTERNATIONAL	18915	19091	18718	3177221	61315.95					15081.26	5215.84
	3	19091	18718	3177387	61315.95					15081.26	5215.84
	18918										
TOTAL	309583	315416	308278	24622435	165436.26					138021.75	6250.20
	1602	315416	308278	78308	138.40					138021.75	6250.20
	311185			24700744	165574.66						
UNITED DOMESTIC	655592	6889350	654027	52741503	3688408.49					237493.42	14734.23
	952	669350	654027	37112	3688408.49					14734.23	3.97
	656544			52778615	3688408.49						
INTERNATIONAL	14076	14117	13890	2442100	70638.11					237493.42	14734.23
TOTAL	689668	683467	667917	55183603	438046.80					244558.84	14734.23
	952	670620	663467	37112	438046.80					244558.84	3.97
				55220715	438046.80						
US AIR DOMESTIC	391427	398250	391220	24772843	25280.71					7085.22	840.80
	3242	394669	398250	189027	25280.71						
				24961870	25280.71						
WESTERN DOMESTIC	43972	44814	43882	2786026	15770.88					77670.82	
		1456	1449	134119	567.20					77670.82	
INTERNATIONAL	1467			2920145	16338.08						
TOTAL	45439	46270	45331							11702.84	18.26
TOTAL MAJORS DOMESTIC	4920304	5011088	4892579	34912889	3326476.38					1333739.77	29443.35
	8532	5011088	4892579	502172	8930.32					50.00	314.13
	4928836			349631081	333506.68					820.00	29443.35

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group	Air Carrier	Type of Operation	Aircraft departures			Enplaned revenue tons				
			Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail
1	2	3	4	5	6	7	8	9	10	Nonpriority
TOTAL, MAJORS										
INTERNATIONAL										
--SCHEDULED	259813	261405	255497	30295893	1328830.96	103.01	103375.91	400.00	27224.70	15957.61
--NON SCHEDULED	1293	1293	146746	8193.31						
--ALL SERVICES	261106	261405	255497	30442439	1337024.27	103.01	103775.91		27224.70	15957.61
TOTAL	5180117	5272473	5148076	379424582	4655307.32	923.10	1437115.68	450.00	58868.05	16217.74
--SCHEDULED	9825	9825	848918	17123.63						
--NON SCHEDULED	5189942	5272473	5148076	380073500	4672430.95	923.10	1437585.68		58868.05	16217.74
NATIONAL										
--SCHEDULED	25535	27307	25194	1300924	2145.40					
--NON SCHEDULED	102	25637	27307	6204						
--ALL SERVICES			25194	1307128	2145.40					
AIR CALIFORNIA										
DOMESTIC										
--SCHEDULED										
--NON SCHEDULED										
--ALL SERVICES										
AIR WISCONSIN										
DOMESTIC										
--SCHEDULED	87296	92501	87202	2160010	954.00					
--NON SCHEDULED										
--ALL SERVICES										
ALASKA										
DOMESTIC										
--SCHEDULED	80489	80740	79693	3907881	39180.76					
--NON SCHEDULED	745	81234	80740	28219	250.31					
--ALL SERVICES				79693	3936080					
ALOHA										
DOMESTIC										
--SCHEDULED	56019	57606	532220	3058105	35821.01					
--NON SCHEDULED	11	56030	57606	739						
--ALL SERVICES				3056844	35821.01					
AMERICA WEST										
DOMESTIC										
--SCHEDULED	177214	179388	176846	11231607	12855.81					
--NON SCHEDULED										
--ALL SERVICES										
BRANIFF										
DOMESTIC										
--SCHEDULED	32549	32755	32472	139740	12642.22	69.15	457.03			
--NON SCHEDULED	3133	32755	32472	127562	8046.41					
--ALL SERVICES	35682			267302	20688.63	69.15	457.03			
INTERNATIONAL										
--SCHEDULED	1423	1434	1417	121330	604.78					
--NON SCHEDULED	191	1614	1434	1417	150045	604.78				
--ALL SERVICES										
TOTAL	33972	34189	33889	3085759	13247.00	69.15	457.03			
--SCHEDULED	3324	34189	33889	73993	8046.41					
--NON SCHEDULED	37296			3139752	21293.41	69.15	457.03			
--ALL SERVICES										

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons					Foreign mail	
	Total performed	Scheduled	Scheduled completed	Enplaned passengers		Freight	Express	Priority	Nonpriority	
				2	3					
HAWAIIAN DOMESTIC	78210	90354	74518	4689985	14851.16	5575.26	366.82			
	1676	80354	74518	134364	4804349	14851.16	5575.26	366.82		
	79886									
INTERNATIONAL	1185	1144	1101	102575	1094.16	847.19				
	150			30895						
	1315	1144	1101	133570	1094.16	847.19				
TOTAL	79375	91498	75819	4772580	15945.32	8422.45	366.82			
	1826			165359						
	81201	91498	75819	4937919	15945.32	8422.45	366.82			
JET AMERICA	12706	12875	12642	788110	960.90	56.40				
	1			147						
MIDWAY DOMESTIC	65838	67373	65462	3618586	860.90	56.40				
	207	12875	12642	788257						
	65843			6982						
	65843	67373	65462	3625548						
PACIFIC SOUTHWEST DOMESTIC	177116	179703	176316	11171621	19146.89	9539.00				
	385			44233						
	177501	179703	176316	11215854	19146.89	9539.00				
SOUTHWEST DOMESTIC	248045	249346	247145	14208181	11762					
	115			14219943						
	248160	249346	247145	1190128						
TRANSTAR DOMESTIC	24513	24513	24513	1190729						
				1190857						
ZANTOP DOMESTIC	13729	9738	9665	80866.00						
TOTAL NATIONALS DOMESTIC	1078851	1105993	1088882	60387287	218424.15	69.15	37729.55	10852.82	.02	
	7989			406199	8296.72		610.64			
	1086820	1105993	1088882	60793486	22720.87	69.15	38340.19	10852.82	.02	
INTERNATIONAL	2588	2578	2518	223805	1698.94		847.19			
	341			59710						
	2929	2578	2518	283815	1698.94		847.19			
TOTAL	1081439	1108571	1069200	80611192	221123.06	69.15	38576.74	10852.82	.02	
	8310			465809	8296.72		610.64			
	1089749	1108571	1069200	61077101	222419.81	69.15	39187.38	10852.82	.02	

TABLE 4-6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight		U.S. Mail		Foreign mail
					Priority	Express	Priority	Express	
LARGE REGIONALS	2	3	4	5	6	7	8	9	10
AIR AMERICA DOMESTIC	978 391 1369	982 982 384248	982 58 1527	265431 118817	2040.00 2040.00				
INTERNATIONAL	57 7 64	58 58 1040	58 9703	8176 278.00					
TOTAL	1035 388 1433	1040 1040 1040	1040 1040 393951	273807 120344 2318.00	2318.00 2318.00				
ARROW DOMESTIC	697 165 882	697 697 697	697 310 310	6405 5163 11568	30 50 80				
INTERNATIONAL	310 112 422	310 310 310	310 310 310	6123 2784 8887	30 20 50				
TOTAL	1007 297 1304	1007 1007 1007	1007 1007 1007	12528 7927 20456	80 70 .30				
ASPEN DOMESTIC	30094 113 30207	30802 30802 29533	29533 2886 838018	335330 2886 9117.28					
BRITT DOMESTIC	42979 225 43204	51088 51088 42785	42785 42785 378977	378059 2918 16784.04					
FLORIDA EXPRESS DOMESTIC	31541 83 31624	31970 31970 31541	31541 31541 1189745	1185321 4424 1189745					
HORIZON DOMESTIC	140899 123 141022	145430 145430 141086	141086 141086 1400287	1395338 4949 13497.62	34097.62 34097.62				
MARKAIR DOMESTIC	15078 797 15875	18575 18575 14467	14467 14467 302845	299562 3983 18408.72	15656.75 2751.97 18408.72				

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures	Enplaned revenue tons						Foreign mail				
		Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority	9	10
1	2	3	4	5	6	7	8	9	9	9	9	10
MID PACIFIC DOMESTIC-----SCHEDULED	28532	31169	27235	838710	9480.32			1699.41	290.80			
MIDWEST EXPRESS DOMESTIC-----SCHEDULED	8292	8404	8292	286012	875.00			3.00	1987.00			
	61			2280								
	8353	8404	8292	288292	875.00			3.00	1987.00			
NORTHERN AIR DOMESTIC-----SCHEDULED	7728	7065	6958		16388.08			592.59	18888.63			
PRESIDENTIAL DOMESTIC-----SCHEDULED	23317	24287	22874	826705								
	320	24287	22874	23347								
	23637			850052								
REEVE DOMESTIC-----SCHEDULED	2471	2671	2428	44584	1305.63			2985.58				
	86			1224	150.97			34.50				
	2557	2671	2428	45808	1456.60			3000.09				
ROSENBAUM INTERNATIONAL-----SCHEDULED	84		84			2884.20						
SUNWORLD DOMESTIC-----SCHEDULED	20164	20442	15180	898975	398.90			552.80				
	29			1887								
	20193	20442	15180	898982	398.90			552.80				
TOWER INTERNATIONAL-----SCHEDULED	589	589	589	170842								
	16	605	589	589	57738							
				228878								
TOTAL, LARGE REGIONALS DOMESTIC-----SCHEDULED	352770	371402	344038	7248027	104348.92			21798.27	39208.36			
	2413			185115	8098.44			34.50				
	355483	371402	344038	741342	112415.36			21832.77	39208.36			
INTERNATIONAL-----SCHEDULED	1040	957	1041	179018	9285.50							
	135			59883	2784.20							
	1175	957	1041	238281	12049.70							
TOTAL-----SCHEDULED	353110	372359	345079	742765	113634.42			21798.27	39208.36			
	2548			224878	10830.64			34.50				
	356358	372359	345079	7851723	124485.06			21832.77	39208.36			
MEDIUM REGIONALS-----												
AERIAL TRANSIT INTERNATIONAL-----SCHEDULED	98	98	98					199.80				
	394							54.19				
	492	98	98					56.18				

TABLE 4.6
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 MONTHS ENDED DECEMBER 31, 1987

Carrier Group Air Carrier	Type of Operation Type of Service	Aircraft departures			Enplaned passengers	Freight	Express	Enplaned revenue tons		
		Total performed	Scheduled	Scheduled completed				U.S. Mail	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10	
CHALLENGE AIR INT'L INTERNATIONAL	SCHEDULED NONSCHEULED ALL SERVICES	3228 54 3282	3228 3228	3228 3228	73797 4118 77915	40080.00 278.00 40338.00		114.35		
MC GRAND DOMESTIC	SCHEDULED NONSCHEULED ALL SERVICES	413 6 419	413 413 413	413 413 413	9074 120 9194	.04 .04		114.35		
SUNCOAST DOMESTIC	SCHEDULED NONSCHEULED ALL SERVICES	121 1 122	137 137 121	121 121 22810	22691 119 22810			35.00		
INTERNATIONAL	SCHEDULED NONSCHEULED ALL SERVICES	36	38	38	1483			35.00		
TOTAL	SCHEDULED NONSCHEULED ALL SERVICES	157	173	157	24174			35.00		
TOTAL, MEDIUM REGIONALS DOMESTIC	SCHEDULED NONSCHEULED ALL SERVICES	534 7 541	550 550 541	534 534 534	31765 239 32004	.04 .04		35.00		
INTERNATIONAL	SCHEDULED NONSCHEULED ALL SERVICES	3362 448 3810	3382 3382 3382	3382 4118 79398	75280 5697.00 45556.80	40259.80 5697.00 45556.80		114.35		
TOTAL	SCHEDULED NONSCHEULED ALL SERVICES	3896 455 4351	3912 3912 3912	3896 4357 111402	107045 5697.00 45556.84	40259.84 5697.00 45556.84		114.35		
OVER-ALL TOTAL, ALL CARRIERS DOMESTIC	SCHEDULED NONSCHEULED ALL SERVICES	6352459 18921 6371380	6489013 6303833 6489013	6303833 411788993 3875542.95	416795968 1074025 3875542.95	3850249.47 25293.48	889.24	1393302.59	79502.53	314.15
INTERNATIONAL	SCHEDULED NONSCHEULED ALL SERVICES	266803 2217 268020	262418 262418 262418	30773898 1380075.20 31043733	269837 16854.51 1386729.71	103.01	104337.45 400.00 103.01	27224.70	15957.61	
TOTAL	SCHEDULED NONSCHEULED ALL SERVICES	6619262 21138 6840400	6757315 6586251 6757315	447589864 1313862 448913726	5030324.67 41847.99 5072272.66	992.25	1497640.04 1085.14 992.25	106727.23	16271.76	
								1498735.18	106727.23	16271.76

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10
50 U. S. STATES									
ALABAMA									
DOMESTIC									
SCHEDULED	39984	40544	39735	1805436 2343	11112.77			3383.75	.03
NON SCHEDULED	35			1807779	11112.77			3383.75	.03
ALL SERVICES	40019	40544	39735	284 284					.10
INTERNATIONAL									
SCHEDULED	1								
NON SCHEDULED	3								
ALL SERVICES	4								
TOTAL									
ALASKA									
DOMESTIC									
SCHEDULED	39985	40544	39735	1805436 2627	11112.77			3383.75	.03
NON SCHEDULED	38			1808063	11112.77			3383.75	.03
ALL SERVICES	40023	40544	39735	284 284					.10
TOTAL									
ARIZONA									
DOMESTIC									
SCHEDULED	68393	69926	64255	1885808 26187	257687.87 8855.86			49131.84	24.90
NON SCHEDULED	1468			1891998	288843.53			73.61	
ALL SERVICES	67861	69926	64255	288843.53	15950.08			49131.84	24.90
INTERNATIONAL									
SCHEDULED	1853	1517	1482	1804	94326.91			5181.88	1983.05
NON SCHEDULED	28			150	94326.91			5181.88	1983.05
ALL SERVICES	1879	1517	1482	1954	94326.91			5181.88	1983.05
TOTAL									
ARKANSAS									
DOMESTIC									
SCHEDULED	158255	158185	155866	10334755 14590	31226.90 2212.18			.92	15684.97
NON SCHEDULED	653			10349345	33339.08			.92	15684.97
ALL SERVICES	158908	158185	155866	10334755 14590	33339.08			.92	15684.97
INTERNATIONAL									
SCHEDULED	385	365	384	23095	1.01				1.58
NON SCHEDULED									1.58
ALL SERVICES	158620	158550	156030	10357850 14590	31227.91 2212.18			.92	15685.14
TOTAL								.92	15685.14
CALIFORNIA									
DOMESTIC									
SCHEDULED	15116	15262	15082	879535 205	784.06			3556.24	
NON SCHEDULED	3			879740	784.06			3556.24	
ALL SERVICES	15119	15262	15082	879535 205	784.06			3556.24	
INTERNATIONAL									
SCHEDULED	682385	676949	658271	50132775 122417	562088.52 2815.67			141478.84 33.66	4328.80
NON SCHEDULED	2338			50255192	564804.19			307.90	4328.80
ALL SERVICES	684723	676949	658271	50132775 122417	562088.52 2815.67			141512.50	4328.80
TOTAL									
INTERNATIONAL									
SCHEDULED	7444	7472	7408	1130198 400	24415.82 1283.53			4713.27	578.87
NON SCHEDULED	20			1130598	25679.35			4713.27	578.87
ALL SERVICES	7464	7472	7408	1130598	25679.35			4713.27	578.87

TABLE 4-7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Aircraft departures			Enplaned passengers			Enplaned			Enplaned revenue tons		
		Total performed	Scheduled	Scheduled completed	Freight	Express	Priority	U.S. Mail	Nonpriority	Foreign mail			
1	2	3	4	5	6	7	8	9	10				
CALIFORNIA	TOTAL	669829	684421	685679	51262973	588504	34	307.90	148192	11	4907.47	28.18	
	SCHEDULED	2358	122817	51385790	4079.20	590583	54	307.90	148225	77	4907.47	28.18	
	NON SCHEDULED												
	ALL SERVICES	672187	684421	685679									
COLORADO	TOTAL	228101	232292	225617	16740170	69253	66	19.80	51780	53	623.85		
	SCHEDULED	228	232292	225617	9088	3	50	19.80	51780	53	623.85		
	NON SCHEDULED				16749258	69257	16						
	ALL SERVICES	228329											
INTERNATIONAL	TOTAL	101	104	100	19042	241	38						
	SCHEDULED	228202	232396	225717	16759212	69495	04	19.80	51780	64	623.85		
	NON SCHEDULED	228	232396	225717	9088	3	50						
	ALL SERVICES	228430			16768300	69498	54	19.80	51780	64	623.85		
CONNECTICUT	TOTAL	31284	31804	31063	2284848	9890	54						
	SCHEDULED	47	31804	31063	2267431	9890	54	.37	14882	71	623.00		
	NON SCHEDULED				2583			.37	14882	71	623.00		
	ALL SERVICES	31331											
DOMESTIC	TOTAL	13	1	2	255	.02							
	SCHEDULED	13	1	2									
INTERNATIONAL	TOTAL	31297	31805	31065	2265103	9890	56						
	SCHEDULED	47	31805	31065	25613			.37	14882	71	623.00		
	NON SCHEDULED				2267686	9890	56						
	ALL SERVICES	31344											
DELAWARE	TOTAL	553	676	549	2262	226	06						
	DOMESTIC												
	SCHEDULED												
DIST. OF COLUMBIA	TOTAL	185039	189413	182406	11787573	49676	62	12.65	47220	28	1989.33	2.19	
	SCHEDULED	142	189413	182406	6380	49676	62	12.65	47220	28	1989.33	2.19	
	NON SCHEDULED				11793933								
	ALL SERVICES	185181											
DOMESTIC	TOTAL	1263	1327	1273	235932	3745	22						
	SCHEDULED				148								
	NON SCHEDULED				236078								
	ALL SERVICES	1285											
FLORIDA	TOTAL	186332	190740	183679	12023505	53421	84	12.65	51917	56	1989.70	2.19	
	SCHEDULED	144	190740	183679	6506	53421	84	12.65	51917	56	1989.70	2.19	
	NON SCHEDULED				12030011								
	ALL SERVICES	186486											
DOMESTIC	TOTAL	405175	411806	403018	3035080	143081	76	2.23	59101	78	1357.24	13.09	
	SCHEDULED	2082	411806	403018	191908	3209	48						
	NON SCHEDULED				30546988	146291	24						
	ALL SERVICES	407237											
INTERNATIONAL	TOTAL	17230	17544	17077	2009119	58930	13		4860	34	837.20	6.30	
	SCHEDULED				9240	7570	20						
	NON SCHEDULED				2018359	64500	33		4860	34	837.20	6.30	
	ALL SERVICES	17813											

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons					
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10
FLORIDA									
TOTAL	422405	429150	420095	32364199	200011.89	2.23	63782.12	2194.44	19.39
SCHEDULED	2645	429150	420095	201148	10779.68	2.23	63782.12	2194.44	19.39
NON SCHEDULED	425050			32565347	210791.57				
ALL SERVICES									
GEORGIA									
TOTAL	295457	300721	294732	22938623	131417.90	.12	117637.57	57.22	.01
SCHEDULED	311	300721	294732	22948732	131417.90	.12	117637.57	57.22	.01
NON SCHEDULED	295768								
ALL SERVICES									
INTERNATIONAL									
TOTAL	3455	3468	3444	493122	6852.27		1053.69		
SCHEDULED	6	3468	3444	493379	6852.27		1053.69		
NON SCHEDULED	3461								
ALL SERVICES									
TOTAL	298912	304189	298176	23431745	138070.17	.12	118891.26	57.22	.01
SCHEDULED	317	304189	298176	23442111	138070.17	.12	118891.26	57.22	.01
NON SCHEDULED	299229								
ALL SERVICES									
HAWAII									
TOTAL	190809	168878	11632283	157306.40	50.98	15755.21	1473.91		
SCHEDULED	1147	190809	168878	86887					
NON SCHEDULED	177677			11719180	157306.40	50.98	15755.21	1473.91	
ALL SERVICES									
INTERNATIONAL									
TOTAL	3418	3408	3360	726429	15581.38	6.87	5467.18	182.99	1.83
SCHEDULED	88	3408	3360	17936	15581.38	6.87	5467.18	182.99	1.83
NON SCHEDULED	3504			744365					
ALL SERVICES									
TOTAL	179946	194217	172238	12358722	172887.78	57.83	21222.39	1656.90	1.83
SCHEDULED	1235	194217	172238	104823	12463545	57.83	21222.39	1656.90	1.83
NON SCHEDULED	181181								
ALL SERVICES									
IDAHO									
TOTAL	32286	32155	680932	8001.44		6897.14			
SCHEDULED	19	32286	32155	885	1.50				
NON SCHEDULED	32380		681817	8002.94		6897.14			
ALL SERVICES									
ILLINOIS									
TOTAL	405975	423812	404879	28870535	300306.84	6.85	126508.82	6591.18	9.33
SCHEDULED	628	423812	404879	21244	300306.84	6.85	126508.82	6591.18	9.33
NON SCHEDULED	4066607			28891779					
ALL SERVICES									
INTERNATIONAL									
TOTAL	3024	3047	3012	399765	8189.26		3466.54	21.47	3.83
SCHEDULED	7	3047	3012	132	260.98		3466.54	21.47	3.83
NON SCHEDULED	3031			399897	8450.25				
ALL SERVICES									
TOTAL	409003	426859	407891	29270300	308496.10	6.85	129975.36	6612.96	12.96
SCHEDULED	635	426859	407891	21378	260.99	6.85	129975.36	6612.96	12.96
NON SCHEDULED	409638			29291676	308757.08				
ALL SERVICES									
INDIANA									
TOTAL	65418	66737	64477	2891927	17734.65	.20	11372.16	2.35	
SCHEDULED	1037	66737	64477	48594	2938521	17734.65	.20	11372.16	2.35
NON SCHEDULED	66453								
ALL SERVICES									

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Aircraft departures			Enplaned passengers			Enplaned			Enplaned revenue tons		
		Total performed	Scheduled	Scheduled completed	Enplaned	Passenger	Freight	Express	Priority	U.S. Mail	Nonpriority	9	10
INDIANA	INTERNATIONAL--SCHEDULED	4											
	TOTAL--SCHEDULED	65420	66737	64477	2891927	17734.65	.20	11372.16				2.35	
	NONSCHEDULED	1037			46594	17734.65	.20	11372.16				2.35	
	ALL SERVICES	66457	66737	64477	2938521								
LOUISIANA	DOMESTIC--SCHEDULED	35305	36446	35104	1240814	7370.26	.04	7472.49					
	NONSCHEDULED	91			4039	7370.26	.04	7472.49					
	ALL SERVICES	35396	36446	35104	1244853								
KANSAS	DOMESTIC--SCHEDULED	17220	17814	17080	672579	9810.84	5.46	2788.51				.55	
	NONSCHEDULED	15			151	672730	9810.84	5.46	2788.51			.55	
	ALL SERVICES	17235	17814	17080									
KENTUCKY	DOMESTIC--SCHEDULED	37847	38540	37728	1368404	9754.17		6319.07				.01	
	NONSCHEDULED	62			2772	9754.17		6319.07				.01	
	ALL SERVICES	37999	38540	37728	1371178								
LOUISIANA	DOMESTIC--SCHEDULED	68332	69153	68003	4126289	21195.36	.53	10120.46					
	NONSCHEDULED	104			5957	21195.36	.53	10120.46					
	ALL SERVICES	68426	69153	68003	4132246								
INTERNATIONAL	DOMESTIC--SCHEDULED	401	401	388	27262	16.34						.02	
	TOTAL--SCHEDULED	68723	69554	68391	4153551	21212.70	.53	10120.48					
	NONSCHEDULED	104			5957	21212.70	.53	10120.48					
	ALL SERVICES	68827	69554	68391	4159508								
MAINE	DOMESTIC--SCHEDULED	11385	11569	11353	71574	3354.70		1589.80					
	NONSCHEDULED	5			196	3354.70		1589.80					
	ALL SERVICES	11390	11569	11353	715940	3354.70		1589.80					
INTERNATIONAL	DOMESTIC--SCHEDULED	11441	11569	11354	715744	3354.70	23.33	1589.80					
	NONSCHEDULED	19			286	3354.70	23.33	1589.80					
	ALL SERVICES	11460	11569	11354	716040								
MARYLAND	DOMESTIC--SCHEDULED	63805	64586	63163	3948701	14905.67	.10	15895.84				.735.49	
	NONSCHEDULED	139			4104	14905.67	.10	15895.84				.735.49	
	ALL SERVICES	63744	64586	63163	3952805								
INTERNATIONAL	DOMESTIC--SCHEDULED	594	611	590	57126	600.88						.528.42	
	TOTAL											.16.11	

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned passengers				Enplaned revenue tons			
	Total performed	Scheduled	Scheduled completed	Enplaned passenger	Freight	Express	Priority	Nonpriority	U.S. Mail	Nonpriority	U.S. Mail	Foreign mail
1	2	3	4	5	6	7	8	9	10			
MARYLAND TOTAL	64199	65177	63753	4005827	15506.56	.10	16524.06	751.60				
	139			4104								
	64338	65177	63753	4009931	15506.56	.10	16524.06	751.60				
MASSACHUSETTS DOMESTIC	117938	119401	115781	9931449	98462.20	.50	31083.42	774.52	78.02			
	344			20714	120.10							
	118282	119401	115781	995163	98582.30	.50	31083.42	774.52	78.02			
INTERNATIONAL	2634	2660	2599	400336	7766.65		968.18	5.24				
	1			176								
	2635	2660	2599	400612	7766.65		968.18	5.24				
TOTAL	120572	122061	118380	10334885	106228.85	.50	32051.60	779.76	78.02			
	345			20890	120.10							
	120917	122061	118380	10355775	106348.95	.50	32051.60	779.76	78.02			
MICHIGAN DOMESTIC	164088	168441	163979	10284754	56955.56	4.26	39205.87	37.41	3.01			
	419			59842	211.00							
	164507	168441	163979	10344656	57110.56	4.26	39205.87	37.41	3.01			
INTERNATIONAL	540	563	537	94576	1712.45		479.59	85				
	1			140								
	541	563	537	94716	1712.45		479.59	.85				
	164628	169004	164516	10379330	58672.01	4.26	39685.46	38.26	3.01			
	420			60082	211.00							
	165048	169004	164516	10439412	588863.01	4.26	39685.46	38.26	.01			
MINNESOTA DOMESTIC	114314	116918	113987	8379012	52217.74	1.86	46487.92	32.43	142.37			
	318			54059	11.45							
	114632	116918	113987	8433071	52229.19	1.86	46487.92	32.43	142.37			
INTERNATIONAL	307	305	302	85023	1898.24		147.60					
	15											
	322	305	302	85023	1898.24		147.60					
	114621	117223	114289	8464035	54115.98	1.86	46635.52	32.43	142.85			
	333			54059	11.45							
	114954	117223	114289	8518094	54127.43	1.86	46635.52	32.43	142.85			
MISSISSIPPI DOMESTIC	11578	11666	11539	505088	706.53		1775.72					
	6			192								
	11584	11666	11539	505280	706.53		1775.72					
MISSOURI DOMESTIC	206709	210666	205557	14279592	60597.56	16.93	69921.78	158.80				
	552			21347								
	20731	210666	205557	14300939	60597.56	16.93	69921.78	158.80				

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10
MISSOURI INTERNATIONAL - SCHEDULED	404	406	402	62367	712.34		488.39		
TOTAL - SCHEDULED	207113	211072	205959	14341959	61309.90	16.93	70410.17	158.80	
NON-SCHEDULED	592			21347	61309.90	16.93	70410.17	158.80	
ALL SERVICES	207705	211072	205959	14363306					
MONTANA DOMESTIC - SCHEDULED	38069	38830	37862	742582	7520.75		3040.39		
TOTAL - SCHEDULED	9	38078	38830	37862	742835	7520.75		3040.39	
NON-SCHEDULED				253					
ALL SERVICES									
NEBRASKA DOMESTIC - SCHEDULED	28337	28630	27931	1298648	3879.16	.01	9997.44	7.50	
TOTAL - SCHEDULED	44	28381	28630	27931	1301711	3879.16	.01	9997.44	7.50
NON-SCHEDULED									
ALL SERVICES									
NEVADA DOMESTIC - SCHEDULED	119659	120831	116505	8316059	9008.63	3.29	6814.23	.71	
TOTAL - SCHEDULED	1182	120831	116505	104163	2529.85				
NON-SCHEDULED				8420222	11538.48	3.29	6814.23	.71	
ALL SERVICES									
NEW HAMPSHIRE DOMESTIC - SCHEDULED	119662	120831	116505	8316059	9008.63	3.29	6814.23	.71	
TOTAL - SCHEDULED	1182	120844	120831	116505	104163	2529.85			
NON-SCHEDULED					420222	11538.48	3.29	6814.23	
ALL SERVICES									
NEW JERSEY DOMESTIC - SCHEDULED	135183	137231	132345	11059347	113632.27	2.46	28626.31	1717.96	
TOTAL - SCHEDULED	200	137231	132345	12400	1122.29				
NON-SCHEDULED				11071747	114754.56	2.46	28626.31	1717.96	
ALL SERVICES									
INTERNATIONAL - SCHEDULED	1425	1428	1406	223511	14789.83		88.34		
TOTAL - SCHEDULED									
NON-SCHEDULED									
ALL SERVICES									

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Aircraft departures				Enplaned revenue tons				
		Total performance	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10	
NEW MEXICO	DOMESTIC	38405	36765	36258	210942	3912.29		4579.55		2.35
	SCHEDULED	22			2106			4579.55		
	NON SCHEDULED				211048					
	ALL SERVICES	38427	36765	36258						
INTERNATIONAL	DOMESTIC	1								
	SCHEDULED	38406	36765	36258	210942	3963.02		4579.55		2.35
	NON SCHEDULED	22			2106			4579.55		
	ALL SERVICES	38428	36765	36258	211048					
NEW YORK	DOMESTIC	311616	317425	307615	23741342	176659.78	5.96	87550.78	5437.90	13.48
	SCHEDULED	1123			52807	860.67		87550.78		
	NON SCHEDULED				2379249	177520.45	5.96			
	ALL SERVICES	312739	317425	307615						
INTERNATIONAL	DOMESTIC	18733	19090	18682	3793941	64655.06		25798.70	4393.51	20.80
	SCHEDULED	66			61609	1020.89				
	NON SCHEDULED				3855550	65715.95		25798.70	4393.51	
	ALL SERVICES	18799	19090	18682						
TOTAL	DOMESTIC	330349	338515	326277	2753583	2411354.84	5.96	113349.48	9831.41	34.08
	SCHEDULED	1189			11516	1881.56				
	NON SCHEDULED				243238.40	5.96		113349.48	9831.41	
	ALL SERVICES	331538	338515	326277	27649799					
NORTH CAROLINA	DOMESTIC	179583	182554	178891	9993579	58655.84	.04	25156.30	9.50	
	SCHEDULED	219			5205					
	NON SCHEDULED				9999784	58655.84	.04	25156.30	9.50	
	ALL SERVICES	179802	182554	178891						
INTERNATIONAL	DOMESTIC	231	230	57	23342	495.77				
	SCHEDULED									
	NON SCHEDULED	179814	182784	178748	10011921	57151.61	.04	25172.26	9.50	
	ALL SERVICES	180033	182784	178748	10023126	57151.61	.04	25172.26	9.50	
NORTH DAKOTA	DOMESTIC	14013	14127	13878	520330	2159.75		1487.57		13
OHIO	DOMESTIC	204497	208487	203518	10761987	136827.99	.33	43712.71	289.48	
	SCHEDULED	637			20451	177.30				
	NON SCHEDULED				10782438	137005.29	.33	43712.71	289.48	
	ALL SERVICES	205134	208487	203518						
INTERNATIONAL	DOMESTIC	206	200	204	27776	501.27				
	SCHEDULED	204703	208887	203722	10788763	137329.26	.33	43713.68	289.48	
	NON SCHEDULED	637			20451	177.30				
	ALL SERVICES	205340	208887	203722	10810214	137506.56	.33	43713.68	289.48	
OKLAHOMA	DOMESTIC	55744	58707	55118	2891699	14281.25	1.47	9152.78	.55	
	SCHEDULED	56			2787	31.30				
	NON SCHEDULED				2894486	14312.55	1.47	9152.78	.55	
	ALL SERVICES	55800	58707	55179						

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Aircraft departures				Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10	
OREGON DOMESTIC	SCHEDULED	95701	97656	95215	3330162	40564.35	27.55	10598.37	22.04	.03
	NONSCHEDULED ALL SERVICES	96036	97656	95215	9039	3339201	40564.35	27.55	10772.78	22.04
INTERNATIONAL	SCHEDULED	258	261	258	22724	1277.11		39.56		.03
	NONSCHEDULED ALL SERVICES	95959	97917	95473	3352686	41841.46	27.55	10637.93	22.04	.03
TOTAL	SCHEDULED	95959	97917	95473	9039	3361925	41841.46	27.55	10812.34	22.04
	NONSCHEDULED ALL SERVICES	96294	97917	95473						.03
PENNSYLVANIA DOMESTIC	SCHEDULED	240068	244315	239251	15584429	73964.79	.05	72851.74	908.02	4.88
	NONSCHEDULED ALL SERVICES	240807	244315	239251	15627444	74027.71	.05	72851.74	908.02	4.88
INTERNATIONAL	SCHEDULED	802	814	788	74153	359.60		121.23		.62
	NONSCHEDULED ALL SERVICES	803	814	788	74153	359.60		121.23		.62
TOTAL	SCHEDULED	240670	245129	240039	15658582	74324.39	.05	72772.97	916.84	4.88
	NONSCHEDULED ALL SERVICES	241610	245129	240039	15701597	74387.31	.05	72772.97	916.84	4.88
RHODE ISLAND DOMESTIC	SCHEDULED	13115	13383	13065	862164	2785.77		2112.70		.15
	NONSCHEDULED ALL SERVICES	13151	13383	13065	864078	2785.77		2112.70		.15
SOUTH CAROLINA DOMESTIC	SCHEDULED	39911	40601	39487	1985945	2933.81		5624.64		.01
	NONSCHEDULED ALL SERVICES	39946	40801	39487	1967040	2933.81		5624.64		.01
SOUTH DAKOTA DOMESTIC	SCHEDULED	13269	13483	13133	422239	1392.41		1891.97		.09
	NONSCHEDULED ALL SERVICES	13275	13483	13133	423083	1392.41		1891.97		.09
TENNESSEE DOMESTIC	SCHEDULED	183754	185853	183033	8940534	524564.23		32579.24	1.33	1.53
	NONSCHEDULED ALL SERVICES	183920	185853	183033	8947174	524767.90		32579.24	1.33	1.53
INTERNATIONAL	SCHEDULED	2								
	NONSCHEDULED ALL SERVICES	183756	185853	183033	8940534	524564.23		32579.24	1.33	1.53
TOTAL	SCHEDULED	183756	185853	183033	8947174	524767.90		32579.24	1.33	1.53
	NONSCHEDULED ALL SERVICES	183922	185853	183033						

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY,
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons					
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10
TEXAS DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	555780 599 556379	582083 582083	554012 554012	40350844 40235 40391079	174176.38 95.28 174271.66	389.13 50.00 389.13	107232.96 107282.96	1026.91 1026.91	1.57 1.57
INTERNATIONAL DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	9324 192 9516	9307 9307	9255 9255	1073290 28856 1102146	12347.36 12347.36	3.02 3.02	1141.86 1141.86	13.91 13.91	
TOTAL DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	565104 791 565895	571390 571390	563287 563287	41424134 68091 41493225	186523.74 95.28 186619.02	392.15 50.00 392.15	108374.82 108424.82	1040.82 1040.82	1.57 1.57
UTAH DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	74596 16 74612	75854 75854	74735 74735	4727798 799 4728595	27845.10 27845.10	.01 .01	18514.38 18514.38	3.05 3.05	
INTERNATIONAL DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	74597 16 74613	75854 75854	74735 74735	4727798 799 4728595	27845.10 27845.10	.01 .01	18514.38 18514.38	3.05 3.05	
VERMONT DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	6783 2 6785	6839 6839	6715 6715	361881 361881	1398.45 1398.45		885.75 885.75		
VIRGINIA DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	84228 84 64312	85515 85515	633860 633860	2791554 2815 2794369	7432.56 7432.56	.03 .03	8875.07 8875.07	.52 .52	
WASHINGTON DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	168717 679 189398	172008 172008	167939 167939	7872230 20831 7693161	108804.08 721.98 107526.04	1.42 1.42	35256.08 363.46 35619.54	247.00 247.00	7.93 7.93
INTERNATIONAL DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	1589 5 1594	1579 1579	1587 1587	311836 311836	8211.77 204.66 8416.43		2712.00 2712.00	130.34 130.34	170.53 170.53
TOTAL DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	170306 884 170890	173587 173587	169506 169506	7984066 20831 8004997	115015.85 926.62 115942.47	1.42 1.42 1.42	37988.08 383.46 38331.54	377.34 377.34	178.46 178.46
WEST VIRGINIA DOMESTIC SCHEDULED NON SCHEDULED ALL SERVICES	9229 13 9242	9506 9506	9190 9190	300571 512 301083	833.11 833.11		328.75 328.75		

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
	Total performed		Scheduled	Scheduled completed	Enplaned passengers	Freight		Express	U.S. Mail
	1	2	3	4	5	6	7	8	9
WISCONSIN DOMESTIC NON SCHEDULED ALL SERVICES	59900 114 60014	61402 61402	59385 59385	2556357 5062 2581419	12176.53 12176.53	.13	7882.30 7882.30	926.90 926.90	
WYOMING DOMESTIC NON SCHEDULED ALL SERVICES	12267 5 12272	12510 12510	12200 12200	208204 151 208355	705.69 705.69		264.06 264.06		
TOTAL FOR 50 U. S. DOMESTIC NON SCHEDULED ALL SERVICES	6277497 18565 6298662	6412047 6412047	6227790 6227790	410258875 1052290 41131165	3587999.03 23345.78 3611344.81	.886.89 886.89	1385010.54 695.14 1385705.68	78521.24 78521.24	313.29 313.29
INTERNATIONAL NON SCHEDULED ALL SERVICES	75701 1030 76731	76108 76108	74538 74538	11317124 119426 11438550	325498.81 10320.27 335819.08	.9.89 9.89 9.89	61771.26 8172.53 8172.53	8172.53 235.82 235.82	
TOTAL NON SCHEDULED ALL SERVICES	6353198 19595 6372793	6488155 6488155	6302328 6302328	421575999 1171716 422747715	3913497.84 338686.05 3947163.89	.896.78 .896.78 .896.78	1448781.80 695.14 1447476.94	88693.77 88693.77 86693.77	549.11 549.11 549.11
OTHER U. S. AREAS									
AMERICAN SAMOA INTERNATIONAL NON SCHEDULED ALL SERVICES	419 2 421	408 408	402 402	37662 262 37924	328.76 328.76		88.57 88.57		
CAROLINE ISLANDS INTERNATIONAL NON SCHEDULED	1849	1866	1826	54060	828.56	.1.33	146.46		
GUAM INTERNATIONAL NON SCHEDULED ALL SERVICES	3151 67 3218	3106 3106	3072 3072	351729 13377 385106	68443.23 68443.23 86.84		1804.14 1804.14	20.58 20.58	3.38 3.38
JOHNSON ISLAND INTERNATIONAL NON SCHEDULED	243	245	243	292	4.28		7.25		
MARIANA ISLANDS INTERNATIONAL NON SCHEDULED ALL SERVICES	2279 6 2285	2231 2231	2206 2206	1331117 351 133468	1054.13 1054.13		75.99 75.99	.34 .34	
MARSHALL ISLANDS DOMESTIC NON SCHEDULED ALL SERVICES	1	1	1						
INTERNATIONAL NON SCHEDULED ALL SERVICES	768	773	765	14208	94.28	.01	109.66		
TOTAL NON SCHEDULED	769	774	766	14208	94.28	.01	109.66		

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons									
	Total performed	Scheduled	Scheduled completed	Enplaned passengers			Freight	Express	Priority	U.S. Mail	Nonpriority	Foreign mail	
				2	3	4	5	6	7	8	9	10	
MIDWAY ISLAND INT'L NATIONAL--SCHEDULED	1												
PUERTO RICO DOMESTIC--SCHEDULED	18222	18612	18117	2600314	48875.77					4244.23	600.55		
	81			1482	1947.70					4244.23	600.55		
	18303	18612	18117	2601796	50823.47								
INTERNATIONAL--SCHEDULED	5008	5136	4984	423218	5875.09					60.40	.20		
	4			320	2.10					60.40	.20		
	5013	5136	4984	423538	5877.19								
TOTAL--SCHEDULED	23231	23748	23101	3023532	54750.86					4304.63	600.75		
	85			1802	1949.80								
	23316	23748	23101	3025334	56700.66					4304.63	600.75		
VIRGIN ISLANDS, U.S. DOMESTIC--SCHEDULED	5813	5961	5765	338967	284.29					297.06	52.36		
				98924	484.17					8.12	70.06		
INTERNATIONAL--SCHEDULED	1773	1767	1723	98971	484.17								
	2			47						8.12			
	1775	1767	1723							70.06			
TOTAL--SCHEDULED	7586	7728	7488	437891	768.46					305.18	122.42		
	2			47									
	7588	7728	7488	437938	768.46					305.18	122.42		
TOTAL FOR OTHER U. S. AREAS DOMESTIC--SCHEDULED	24036	24574	23883	2939281	49160.06					4541.29	652.91		
	81			1482	1947.70								
	24117	24574	23883	2940763	51107.76								
INTERNATIONAL--SCHEDULED	15492	15532	15221	1113210	15312.50								
				14357	2.10								
	15532	15221	1127567	15314.60									
TOTAL--SCHEDULED	39528	40106	39104	4052491	64472.56								
	162			15839	1949.80								
	39690	40106	39104	4068330	66422.36								
FOREIGN COUNTRIES													
ARGENTINA DOMESTIC--SCHEDULED	1	380	368	12730	11.39					2.18			
INTERNATIONAL--SCHEDULED	1501	1570	1491	1465589	8079.11					18.39	6.28	9.82	
TOTAL--SCHEDULED	1502	1950	1859	159319	8090.50					20.57	6.28	9.82	
AUSTRALIA INTERNATIONAL--SCHEDULED	1978	1972	1911	311324	20257.25						163.12	1.85	95.16

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
		Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority
1	2	3	4	5	6	7	8	9	10	
AUSTRIA	INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	129	129	126	11188	132.05			.09	
		12	129	126	29				.09	
		141	129	11217	132.05				.09	
BAHAMAS	DOMESTIC--SCHEDULED NON SCHEDULED ALL SERVICES	1671	1676	1861	88615	16.13			1.41	
		9	1676	1861	275	16.13			1.41	
				88890						
INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	5500	5559	5423	622238	278.19			.61	1.10	.04
		19	5559	5423	2321	278.19		.61	1.10	.04
				624559						
TOTAL	--SCHEDULED NON SCHEDULED ALL SERVICES	7171	7235	7084	710853	294.32		2.02	1.10	.04
		28	7235	7084	2598	294.32		2.02	1.10	.04
				713449						
BAHRAIN	INTERNATIONAL--SCHEDULED	1								
BARBADOS	INTERNATIONAL--SCHEDULED	2828	2859	2821	173880	497.79		37.77	1.59	10.99
BELGIUM	INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	3982	3995	3942	78129	23937.93		303.09	90.95	7.01
		35	3995	3942	2170.40	26108.33		303.09	90.95	7.01
BERMUDA	DOMESTIC--SCHEDULED	6								
	INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	4085	4004	3876	440574	449.88		250.40	2.28	10.45
		3	4004	3876	102	18.00		250.40	2.28	10.45
				440676						
TOTAL	--SCHEDULED NON SCHEDULED ALL SERVICES	4091	4004	3876	440681	462.24		251.35	2.28	10.45
		3	4004	3876	102	18.00		251.35	2.28	10.45
				441083						
BOLIVIA	DOMESTIC--SCHEDULED	8	6	6	3					
	INTERNATIONAL--SCHEDULED	312	317	311	14183	67.44			.53	23.99
	TOTAL	318	323	317	14186	67.44			.53	23.99
BRAZIL	INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	2190	2213	2181	209183	42984.78		207.29	.16	59.84
		12	2213	2181	5381	42984.78		207.29	.16	59.84
				214544						

TABLE 4-7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons					Foreign mail	
	Total performed	Scheduled	Scheduled completed	Enplaned passenger		Freight	Express	U.S. Mail		
				5	6					
1	2	3	4	5	6	7	8	9	10	
BRITISH HONDURAS..... INTERNATIONAL--SCHEDULED	211	211	211	1469						
BRITISH WEST INDIES..... DOMESTIC-----SCHEDULED	1104	1137	1089	48742	13.47				.48	
INTERNATIONAL--SCHEDULED	2755	2817	2737	119131	1135.47				42.52	
TOTAL..... INTERNATIONAL--SCHEDULED	3859	3954	3826	165873	1148.94				3.92	
CANADA..... DOMESTIC-----SCHEDULED	49731	47437	48867	3278419	12928.56	2.35	3745.73	328.38	.86	
NONSCHEDULED ALL SERVICES	288	47437	48867	18978	3298397	2.35	3745.73	328.38	.86	
INTERNATIONAL--SCHEDULED	38				2553.65		38.70	31.40		
TOTAL..... NONSCHEDULED ALL SERVICES	48767	47437	48867	3278419	15452.21	2.35	3782.43	359.78	.86	
CHILE..... INTERNATIONAL--SCHEDULED	634	666	633	58257	5774.06		12.73	.84	25.42	
CHINA..... INTERNATIONAL--SCHEDULED	408	422	404	34483	3282.59		2.54	.40	1.28	
COLOMBIA..... INTERNATIONAL--SCHEDULED	1388	1389	1376	103986	12448.18		52.32	8.73		
COOK ISLAND..... INTERNATIONAL--SCHEDULED	24	25	22	850	4.53		1.88			
COSTA RICA..... DOMESTIC-----SCHEDULED	13	13	13							
INTERNATIONAL--SCHEDULED	982	972	960	68026	6808.85					
TOTAL..... INTERNATIONAL--SCHEDULED	975	985	973	68026	6828.09					
CUBA..... INTERNATIONAL--SCHEDULED	2	2	2							
NONSCHEDULED ALL SERVICES	1									
3	2	2								
CZECHOSLOVAKIA..... INTERNATIONAL--SCHEDULED	203	208	200	2239	1.85					
DENMARK..... INTERNATIONAL--SCHEDULED	1397	1410	1390	122426	1522.04					
							52.42	1.37	11.06	

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Type of Service	Aircraft departures				Enplaned revenue tons			
			Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail
1	2	3	4	5	6	7	8	9	10	
DOMINICAN REPUBLIC	DOMESTIC	SCHEDULED	10	7	8	478	32.20			
	INTERNATIONAL	SCHEDULED	4525	4526	638863	17814.87		2.73	3.84	4.44
		NONSCHEDULED	25	661	500.40					
		ALL SERVICES	4550	4635	637324	18415.27		2.73	3.84	4.44
	TOTAL	SCHEDULED	4535	4642	637141	17847.07		2.73	3.84	4.44
		NONSCHEDULED	25	661	500.40					
		ALL SERVICES	4560	4642	637802	18447.47		2.73	3.84	4.44
EQUADOR	INTERNATIONAL	SCHEDULED	1229	1264	1223	75785	3087.68	46.44	11.05	
ARAB REPUBLIC OF EGYPT	INTERNATIONAL	SCHEDULED	302	307	301	19686	303.47		73.16	.03
EL SALVADOR	INTERNATIONAL	SCHEDULED	647	645	641	30791	130.25		71.83	1.27
FIJI	INTERNATIONAL	SCHEDULED	240	158	155	15557	6781.57		210.27	1.85
FINLAND	INTERNATIONAL	SCHEDULED	309	314	307	15363	61.55		45.10	9.05
FRANCE	INTERNATIONAL	SCHEDULED	6774	6836	6703	708046	17168.51		443.25	121.79
FRENCH ANTILLES	INTERNATIONAL	SCHEDULED	424	422	417	20583	85.70		2.39	.59
FRENCH POLYNESIA	DOMESTIC	SCHEDULED		339	332	22306				
	INTERNATIONAL	SCHEDULED	285	287	279	23316	38.88		31.35	.03
	TOTAL	SCHEDULED	285	626	611	45622	38.88		31.35	.03
GERMANY	INTERNATIONAL	SCHEDULED	39844	39788	38988	3891005	53281.28		8795.92	5789.38
		NONSCHEDULED	701	701	94553	1783.52			8795.92	5789.38
		ALL SERVICES	40345	39788	38988	3985558	55044.80			11014.42
GREECE	INTERNATIONAL	SCHEDULED	471	444	438	61477	1243.71		96.33	72.69
		NONSCHEDULED	1	122	61599	1243.71			96.33	72.69
		ALL SERVICES	472	444	438	61599	1243.71			30.66
GUATEMALA	INTERNATIONAL	SCHEDULED	1668	1699	1687	112086	3817.00		27.15	21.23
										4.19

TABLE 4-7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation Type of Service	Aircraft departures			Enplaned revenue tons							
		Total performed	Scheduled	Scheduled completed	Enplaned passengers		Freight	Express	Priority	U.S. Mail	Nonpriority	Foreign mail
					2	3	4	5	6	7	8	9
PAPUA NEW GUINEA	INTERNATIONAL--SCHEDULED	6	6	6	153	2.55						
HAITI	DOMESTIC--SCHEDULED	1	1	1	59							
	INTERNATIONAL--SCHEDULED	1874	1926	1846	178882	4993.87						
	NON SCHEDULED	6	1926	1846	125	190.00						
	ALL SERVICES	1880		178807	5183.87							
	TOTAL											
	SCHEDULED	1875	1927	1847	178741	4983.87						
	NON SCHEDULED	6	1927	1847	125	190.00						
	ALL SERVICES	1881		178866	5183.87							
HONDURAS	INTERNATIONAL--SCHEDULED	388	386	386	14436	.02						
	NON SCHEDULED	1	386	386	14436	38.00						
	ALL SERVICES	387			38.02							
HONG KONG	INTERNATIONAL--SCHEDULED	3189	3283	3180	460036	91697.87						
	NON SCHEDULED	15	3204	3180	460036	1489.76						
	ALL SERVICES			93187.63								
HUNGARY	INTERNATIONAL--SCHEDULED	340	353	338	6915	22.61						
ICELAND	INTERNATIONAL--SCHEDULED	1					102.23					
INDIA	INTERNATIONAL--SCHEDULED	555	558	550	128419	6480.80						
IRELAND	INTERNATIONAL--SCHEDULED	874	903	837	87233	3849.53						
	NON SCHEDULED	2	903	837	230							
	ALL SERVICES	876		87483	3849.53							
ISRAEL	INTERNATIONAL--SCHEDULED	856	858	854	179474	1772.56						
ITALY	INTERNATIONAL--SCHEDULED	1913	1944	1882	344735	11459.54						
JAMAICA	DOMESTIC--SCHEDULED	209	215	208	8487	10.82						
	INTERNATIONAL--SCHEDULED	3251	3287	3209	290054	3813.83						
	TOTAL	3480	3482	3417	298521	3824.65						

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country	Type of Operation	Aircraft departures				Enplaned revenue tons				Foreign mail
		Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	
1	2	3	4	5	6	7	8	9	10	
JAPAN INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	16257 22 16279	16352 16352	15943 15943	2352044 400 2352444	306895.35 306895.35	13147.85 13147.85	7155.11 7155.11	1155.09 1155.09		
KENYA INTERNATIONAL--SCHEDULED	79	81	79	9318	471.29		14.23			.70
KUWAIT INTERNATIONAL--SCHEDULED	1									
LIBERIA INTERNATIONAL--SCHEDULED	15	18	15	757	17.53		1.88			.28
ENGLAND INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	446 1 447	447 447	447 447	130 130 260	6985.00 6985.00					
MALAYSIA INTERNATIONAL--SCHEDULED	97	105	95		7145.59		11.43			1.20
MEXICO DOMESTIC--SCHEDULED	1128	1135	1127	91301	1.80					
INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	14631 29 14680	14817 14817 14817	14480 1273410 1273410	1269624 3786 7806.55	1.72 1.72 1.72	37.80 400.00 437.80	1.61 1.61 1.61			1.97
TOTAL-----SCHEDULED NON SCHEDULED ALL SERVICES	15758 29 15788	15952 15952 15807	15807 15807 1384711	1380925 3786 7808.15	1.72 1.72 1.72	37.80 400.00 437.80	1.61 1.61 1.61			1.97
NETHERLANDS INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	876 2 878	863 863 838	838 838 73338	73075 283 752.69		141.35	19.84			.16
NETHERLANDS ANTILLES DOMESTIC--SCHEDULED	14	14	14	595		141.35	19.84			.16
INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	5045 3 5048	5110 5110 5110	4970 4970 4970	381505 403 381908	6828.68 6828.68 6828.68	27.94 27.94 27.94	3.25 3.25 3.25			.25
TOTAL-----SCHEDULED NON SCHEDULED ALL SERVICES	5059 3 5082	5124 5124 5124	4984 4984 4984	382100 403 382503	6828.68 6828.68 6828.68	27.94 27.94 27.94	3.25 3.25 3.25			.25
NEW CALEDONIA INTERNATIONAL--SCHEDULED	1					52.65	1.56			

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1967

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10
NEW ZEALAND INTERNATIONAL--SCHEDULED	1354	1356	1345	237085	9561.16	2.74	42.21		86.43
NIGERIA INTERNATIONAL--SCHEDULED	16	18	18	1298	2.36				
NORWAY INTERNATIONAL--SCHEDULED	900	941	897	56484	1758.50		16.51	3.86	13.62
	5	941	897	56484	140.06		16.51	3.86	13.62
	905				1898.56				
OMAN INTERNATIONAL--SCHEDULED	13	13	13		640.26		.09		
PAKISTAN INTERNATIONAL--SCHEDULED	141	144	140	13499	18.22			.32	.09
PANAMA INTERNATIONAL--SCHEDULED	1859	1803	1774	131396	6335.59		459.45	90.91	4.78
PAPUA NEW GUINEA DOMESTIC--SCHEDULED			635	48085					
PARAGUAY INTERNATIONAL--SCHEDULED	163	164	163	5447	90.35		11.86	11.71	
PERU INTERNATIONAL--SCHEDULED	522	510	498	35148	695.60		11.16	13.82	
PHILIPPINES INTERNATIONAL--SCHEDULED	1449	1451	1440	250228	13781.15		1435.57	892.73	81.35
POLAND INTERNATIONAL--SCHEDULED	273	257	250	27786	26.29		.05		
PORTUGAL INTERNATIONAL--SCHEDULED	494	499	46	41651	1423.77		17.47	8.55	9.55
ROMANIA INTERNATIONAL--SCHEDULED	98	103	98	4550	73.52			.01	.02
SAUDI ARABIA INTERNATIONAL--SCHEDULED	209	208	208	7416	3.35		7.17		.52
SENEGAL INTERNATIONAL--SCHEDULED	17	19	17	582	3.77				
SINGAPORE INTERNATIONAL--SCHEDULED	620	625	616	57008	18159.33		93.38	3.78	11.54
SOUTH KOREA INTERNATIONAL--SCHEDULED	2403	2441	2388	307280	51792.18		2782.07	1719.48	13.15

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passengers				Enplaned revenue tons			
	Total performed	Scheduled	Scheduled completed			Freight	Express		U.S. Mail	Priority	Nonpriority
1	2	3	4	5	6	7	8	9	9	10	
SPAIN INTERNATIONAL---SCHEDULED	836	847	833	152314	3525.37			335.98	295.28		
SWEDEN INTERNATIONAL---SCHEDULED	918	931	914	62954	514.22			19.80	.56		
	3		157								
	921	931	914	63111	514.22			19.80	.56		
SWITZERLAND DOMESTIC---SCHEDULED	9	9	9	255							
INTERNATIONAL---SCHEDULED	4426	4449	4397	250754	10850.24			708.09	25.59	108.83	
	68			8152							
	4494	4449	4397	258806	10850.24			708.09	25.59	108.83	
	ALL SERVICES										
TOTAL	4435	4458	4406	251009	10850.24			708.09	25.59	108.83	
	68			8152							
	4503	4458	4406	259161	10850.24			708.09	25.59	108.83	
SEYCHELLES DOMESTIC---SCHEDULED	2	2	2		1.10						
TAIWAN INTERNATIONAL---SCHEDULED	2597	2400	2385	210404	107078.05			1294.57	422.04	887.53	
	1										
	2598	2400	2385	210404	107078.05			1294.57	422.04	887.53	
THAILAND INTERNATIONAL---SCHEDULED	403	303	299	80915	9900.46			52.28	20.73	42.55	
TONGA INTERNATIONAL---SCHEDULED	106	104	103	6438	70.02			5.87			
TRINIDAD & TOBAGO INTERNATIONAL---SCHEDULED	1409	1410	1394	101715	313.49			2.13		.07	
TURKEY INTERNATIONAL---SCHEDULED	360	364	358	35877	135.24			124.68	13.77	.16	
	106			16873							
	466	364	358	52750	135.24			124.68	13.77	.16	
UNITED ARAB EMIRATES INTERNATIONAL---SCHEDULED	235	102	46		10488.12			8.85			
UNITED KINGDOM DOMESTIC---SCHEDULED	21	21	20	1370	43.49			.01			
INTERNATIONAL---SCHEDULED	13023	13155	12880	2110595	87154.96			8569.47	1184.84	1089.21	
	5			910							
	13028	13155	12880	2111505	87154.96			8569.47	1184.84	1089.21	

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 MONTHS ENDED DECEMBER 31, 1987

State or Country Type of Operation Type of Service	Aircraft departures				Enplaned revenue tons				Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	10
UNITED KINGDOM TOTAL-----SCHEDULED NON SCHEDULED ALL SERVICES	13044 5 13049	13176 13176	12880 12880	2111985 910 2112875	87198.45 87198.45	6569.48 6568.48	1164.84 1164.84	1099.21 1099.21	
URUGUAY INTERNATIONAL--SCHEDULED	104	104	102	14331	507.24				17.75
U. S. S. R. INTERNATIONAL--SCHEDULED	295	313	294	10788	7.51				.38
VENEZUELA INTERNATIONAL--SCHEDULED	1597	1599	1586	185306	9427.03		23.63	.67	10.08
WESTERN SAO INTERNATIONAL--SCHEDULED	160	146	137	15068	335.80		98.08		
YUGOSLAVIA INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	875 28 903	881 881	855 855	29277 1456 30733	183.08 183.08				
ZAIRE INTERNATIONAL--SCHEDULED	188	188	188	32875	36.75				1.79
TOTAL FOR FOREIGN COUNTRIES DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	52392 275 51201	52180 20253 52180	3597512 3818085	13080.38 13080.38	2.35	3750.78	328.38		.86
INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	175810 1106 176716	172859 172859 172859	18343582 138054 18479816	1039263.89 6332.14 1045598.03	4.48	40485.80	18980.99	15718.11	
TOTAL-----SCHEDULED NON SCHEDULED ALL SERVICES	228054 1381 227917	224819 224819 224819	21941374 158307 22087681	1052354.27 6332.14 1058688.41	6.81	44218.36 400.00 44616.38	19289.37	15718.97	
OVER-ALL TOTAL FOR ALL STATES, AREAS, AND COUNTRIES----- DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	6352458 18921 6371380	64889013 64889013 64889013	6303833 6303833 6303833	418795988 417786993 3875542.95	3650249.47 252513.48	889.24	1383302.59	79502.53	314.15
INTERNATIONAL--SCHEDULED NON SCHEDULED ALL SERVICES	268803 2217 2688020	2688302 2688302 262418	262418 262418 31043733	30773898 269837 1380075.20	103.01	104337.45 400.00 103.01	27224.70	15957.61	
TOTAL-----SCHEDULED NON SCHEDULED ALL SERVICES	6819262 21138 6840400	6757315 6757315 6757315	6568251 1343862 448913726	447569864 41987.98 5072272.86	992.25	1497640.04 1095.14 992.25	1087727.23	16271.76	
						1498735.18	1087727.23	16271.76	

TABLE 4.8
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures						Enplaned revenue tons			
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10	
ATLANTA, GEORGIA (WILLIAM B MARTSFIELD INT'L) 5.31	261680	286544	286922	22649433	1383211.19	.12	117890.91	57.22	.01	
BOSTON, MASSACHUSETTS (LOGAN INTERNATIONAL) 2.40	116848	117809	114332	10255305	105956.48	.48	32081.50	778.78	78.02	
CHARLOTTE, NORTH CAROLINA (DOUGLAS MUNI) 1.41	93502	94728	92823	8021104	32708.33	.03	18422.87	3.46		
CHICAGO, ILLINOIS (MIDWAY) 0.80	44801	45925	44600	2541301	433.75	.04	23.87			
(MEIGS FIELD) 0.00	892	1483	892	8057	269.02					
(O'HARE INTERNATIONAL) 8.12	330123	342262	328846	28121921	301605.86	6.81	129895.45	6612.83	12.86	
COMMUNITY TOTAL 8.72	375616	389850	374338	28671279	302308.33	6.85	129819.32	6612.83	12.86	
DALLAS-FORT WORTH, TEXAS (LOVE FIELD) 0.57	38905	38386	38886	2435525	1.00					
(DALLAS-FT. WORTH REGIONAL) 4.86	227732	229454	228852	19904685	108942.25	7.88	70881.29	1028.98	1.57	
COMMUNITY TOTAL 5.23	286637	288850	285518	22340190	106943.25	7.88	70881.29	1028.98	1.57	
DENVER, COLORADO (STAPLETON INTERNATIONAL) 3.65	201209	204888	199080	15583583	68429.81	19.39	51372.99	623.85		
DETROIT & ANN ARBOR, MICHIGAN (DETROIT METROPOLITAN WAYNE CTY) 2.17	131508	135123	131883	9254473	35268.23	4.28	37165.05	36.88	3.01	
(WILLOW RUN) 0.00	5508	4870	4842		19557.50					
COMMUNITY TOTAL 2.17	137014	139993	138725	9254473	54823.73	4.28	37165.05	36.88	3.01	
HONOLULU, OAHU, HAWAII (HONOLULU INTERNATIONAL) 1.82	92172	98843	86328	7773253	145144.88	57.83	17589.81	1170.42	1.83	

TABLE 4.8
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10
HOUSTON, TEXAS (HOUSTON INTERCONTINENTAL) 1.92	95742	96992	94931	69288902	49385.26	379.29	22508.57		5.68
(WILLIAM P HOBBY) 0.92	64446	65119	64222	3928891	1108.32		434.41		.07
COMMUNITY TOTAL 2.54	160188	162111	159153	10858793	50473.58	379.29	22842.98		5.75
KANSAS CITY, MISSOURI (INTERNATIONAL) 1.05	65372	66304	64857	4481372	17389.54	16.66	21232.02		62.63
(KANSAS CITY MUNI) 0.00	329	176	176		808.00				
COMMUNITY TOTAL 1.05	65701	66480	65033	4481372	18195.54	16.66	21232.02		62.83
LAS VEGAS, NEVADA (MC CARRAN INTL) 1.90	92880	92471	89807	6838053	7832.64	3.29	5208.37		.32
LOS ANGELES/BURBANK/LNG, BICH, CAL (HOLLYWOOD-BURBANK) 0.36	28228	27124	28045	1524476	3044.16		59.42		.05
(LONG BEACH) 0.14	7727	7778	7856	605021	3238.08		23.81		
(LOS ANGELES INTERNATIONAL) 4.44	204398	207335	202390	18969780	307500.73	41.39	65247.84		16.87
(ORANGE COUNTY) 0.50	30848	31655	30898	2119984	1584.68	.35	21.56		.18
COMMUNITY TOTAL 5.44	269199	273890	266787	23219241	315385.63	41.74	65352.83		1644.05
MEMPHIS, TENNESSEE (MEMPHIS INTERNATIONAL) 1.18	107295	108715	107017	5023047	513305.28		21005.71		.35
MIAMI/FT LAUDERDALE, FLORIDA (FT. LAUDERDALE-HOLLYWOOD INTL) 0.92	49882	50309	49249	3929293	22883.93	.24	6212.09		.80
(MIAMI INTERNATIONAL) 2.19	99755	101129	98215	9342215	138301.44	.42	23090.28		19.31
COMMUNITY TOTAL 3.11	149437	151438	147464	13271508	158985.37	.68	29302.37		19.31
MINNEAPOLIS-ST. PAUL, MINNESOTA (MINNEAPOLIS-ST. PAUL INTL) 1.95	110148	112335	108552	8310150	53887.57	1.88	46824.54		32.17
									142.85

TABLE 4.8
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled completed	Enplaned passengers		Priority	U.S. Mail	Nonpriority	Foreign mail	
			4	5					
NEWARK, NEW JERSEY (NEWARK)	1	2	3	4	6	7	8	9	10
NEW YORK, NEW YORK (JOHN F. KENNEDY INT'L.)	136540	138403	133498	11288941	129359.89	2.46	28714.85	1717.98	
LA GUARDIA	74804	74737	72762	10140009	192040.96	57506.07	7365.63	34.00	
COMMUNITY TOTAL	2.64	2.38	2.38	125423	11326309	22886.30	5.94	39072.85	.01
ORLANDO, FLORIDA (ORLANDO INT'L.)	126886	129382	198185	214868318	214827.26	5.94	98578.72	9830.83	34.01
PHILADELPHIA, PA/CAMDEN, NJ (INTERNATIONAL)	201690	204119	86208	84636	7074737	20462.59	1.10	8240.10	1.80
PHOENIX, ARIZONA (PHOENIX SKY HARBOR INT'L.)	95186	97082	94490	8602887	49810.86	.05	46806.17	682.84	4.88
PITTSBURGH PA/WHEELING W. VA (ALLENTOWN COUNTY)	128516	129323	127804	8784880	29339.82	.58	13254.22	1.58	
(GREATER PITTSBURGH)	1.55	2.06	1.91	119858	121125	119214	8156015	15039.28	25896.35
COMMUNITY TOTAL	1.91	1.91	1.91	119859	121126	119215	8156015	15039.78	217.40
ST. LOUIS, MISSOURI (LAMBERT-ST. LOUIS MMU)	138258	140784	137222	9727239	42862.38	.19	49167.13	95.97	
SALT LAKE CITY, UTAH (SALT LAKE CITY INT'L.)	74315	75358	74437	4728595	27720.60	.01	18514.38	3.05	
SAN DIEGO, CALIFORNIA (SAN DIEGO INT'L-LINDBERGH FLD)	63235	64118	62505	4901362	15287.35	1.98	8116.33	8.82	
SAN FRANCISCO/OAKLAND, CAL. (BUCHANAN FIELD)	1453	1492	1447	81788	10.94		41.26		
(OAKLAND METROPOLITAN INT'L.)	38150	38733	37257	1918014	49913.85	.11	5135.86	16.67	
(SAN FRANCISCO INT'L.)	152807	155429	15155	13118774	182882.98	15.29	45240.55	3238.24	11.31

TABLE 4.8
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned passengers				Enplaned revenue tons			
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight		Express	Priority	U.S. Mail	Nonpriority	9	10
					6	7						
1 SAN FRANCISCO/OAKLAND, CAL. COMMUNITY TOTAL 3.54	192210	195654	190229	15086576	232607.57	15.40	50417.67	3252.91	3252.91	3252.91	11.31	
2 SEATTLE/TACOMA, WASHINGTON (BOEING FIELD INT'L.) 0.00 (SEATTLE-TACOMA INTERNATIONAL) 1.60	1592	1583	1580	947	10992.77			.31				
3 COMMUNITY TOTAL 1.60	107331	108593	106163	6825552	95219.91	1.42	34009.16	377.00	377.00	377.00	178.46	
4 TAMPA-ST. PETERSBURG/CLWTRALKLND, FLA (TAMPA INTERNATIONAL) 1.10 (ST. PETERSBURG/CLWTR INT'L.) 0.03	66801	67558	68297	4681615	19310.71	.39	12279.06	.01	12279.06	12279.06	.01	
5 COMMUNITY TOTAL 1.12	2206	2243	2190	117354	3.71			.26			.18	
6 WASHINGTON, DIST. OF C.O.L. (DULLES INTERNATIONAL) 1.15 (WASHINGTON NATIONAL) 1.67	92838	95586	91632	4916890	44955.19	3.38	20750.86	1672.21	1672.21	1672.21	2.19	
7 COMMUNITY TOTAL 2.82	93628	95154	92047	7113121	8466.65	9.27	31166.70	317.49	317.49	317.49		
8 OVER-ALL TOTAL, LARGE HUBS 74.05	186466	190740	183679	12030011	53421.84	12.65	51917.56	1989.70	1989.70	1989.70	2.19	
	4120159	4192435	4078817	316041813	3027156.43	582.49	1128775.23	32378.30	32378.30	32378.30	507.90	

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned revenue tons					Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10
ALBUQUERQUE, NEW MEXICO (ALBUQUERQUE SUNPORT/KIRTLAND AFB) 0.49	33798	34120	33630	2100888	3408.06		4579.55		2.35
AUSTIN, TEXAS (ROBERT MUELLER MUNI) 0.45	32439	32754	32326	1928535	6246.59	.16	3893.07		8.06
BALTIMORE, MARYLAND (BALTO/WASH INTL) 0.94	84082	84921	63497	4009780	15143.16	.10	18524.06		751.00
BUFFALO/NIAGARA FALLS, NEW YORK (GREATER BUFFALO INTERNATIONAL) 0.41	30082	30205	28893	1728880	5343.70	.02	4842.17		.07
CINCINNATI, OHIO (GREATER CINCINNATI) 0.76	61408	62027	61124	3264822	11385.72		14215.00		15.13
CLEVELAND, OHIO (HOPKINS INTERNATIONAL) 0.73	58382	59031	57528	3102547	21073.56	.33	9450.84		4.86
COLUMBUS, OHIO (PORT COLUMBUS INTERNATIONAL) 0.40	29809	30615	29701	1895005	1385.37		7877.63		.42
(LOCKBOURN AFB) 0.00	3708	4081	3612		88988.72		3988.07		288.98
COMMUNITY TOTAL 0.40	33617	34698	33313	1895005	90334.09		11865.70		288.91
DAYTON, OHIO (JAMES M COX DAYTON MUNI) 0.51	38372	39003	38240	2168547	14405.48		8777.58		
EL PASO, TEXAS (EL PASO INTERNATIONAL) 0.31	24520	24732	24444	1329278	3793.07	2.51	1348.83		
FT. MYERS, FLA. (SOUTHWEST) 0.29	18174	18285	18012	1241995	985.20		1677.08		
HARTFORD CON/SPGF/LD/WEST/FLD, MASS (BRADLEY INTL) 0.53	31344	31805	31085	2267888	9890.58	.37	14682.71		623.00
INDIANAPOLIS, INDIANA (INDIANAPOLIS MUNI/WEIR-COOK/) 0.53	41048	40210	39809	2273057	11838.33	.20	10025.34		2.35

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				Foreign mail 10
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	
JACKSONVILLE, FLORIDA (JACKSONVILLE INTERNATIONAL) 0.33	28321	26899	28151	1407222	4884.02		8533.31		
KAHULUI, MAUI, HAWAII (KAHULUI)	0.48	38834	39708	34584	2031710	5103.55	1289.08	305.72	
LIHUE, KAUAI, HAWAII (LIHUE)	0.28	21651	24288	20890	1210842	2429.71	553.77	71.42	
MILWAUKEE, WISCONSIN (GENERAL MITCHELL FIELD) 0.38	27892	28403	27802	1619426	8088.18	.13	8439.78	798.87	
NASHVILLE, TENNESSEE (METROPOLITAN) 0.70	58471	57084	58285	2987233	4998.33		8242.90	.96	
NEW ORLEANS, LOUISIANA (INTERNATIONAL/NOISANT FIELD) 0.78	47180	47734	48870	3311172	14934.15	.35	8285.85		
NORFOLK/VA BCH/PTSMH//CHESPEKE, VA (NORFOLK REGIONAL) 0.38	30013	30503	29842	1550095	3454.72	.03	2438.78	.52	
OKLAHOMA CITY, OKLAHOMA (WILL ROGERS WORLD) 0.35	28138	28835	27758	1508126	7340.20	1.18	4221.34		
(TINKER AFB) 0.00	14	1	1		33.20				
COMMUNITY TOTAL 0.35	28152	28636	27759	1508126	7373.40	1.18	4221.34		
OMAHA, NEBRASKA (EPPLY AIRFIELD) 0.25	20553	20608	20254	1072984	3329.69		9988.92	7.35	
ONTARIO/SAN BERNARD/RIVERSE, CA (ONTARIO INTERNATIONAL) 0.52	38730	37408	35989	2232486	8111.17		8787.20	.88	
PORTLAND, OREGON (PORTLAND INTERNATIONAL) 0.68	70004	71098	68271	2834327	37893.32	27.55	9818.40	22.04	.03
RALEIGH/DURHAM, NORTH CAROLINA (RALEIGH-DURHAM) 0.54	46874	47609	49968	2318211	11791.18		5058.85	.47	

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	10
RENO, NEVADA (RENO INTL.) 0.37	28164	28380	28698	158169	3705.84		1604.86		.38
ROCHESTER, NEW YORK (ROCHESTER-MONROE COUNTY) 0.29	27069	27634	28920	1254005	8970.89		3297.52		.32
SACRAMENTO, CALIFORNIA (SACRAMENTO METROPOLITAN) 0.41	28184	28877	28920	1749987	4124.87	.04	8986.06		.13
SAN ANTONIO, TEXAS (SAN ANTONIO INTERNATIONAL) 0.57	38288	38634	38160	2422259	7942.31	.05	7145.61		
SAN JOSE, CALIFORNIA (SAN JOSE MUNI) 0.66	47203	48377	48828	2807161	10030.85	248.78	3005.79		.23
SAN JUAN, PUERTO RICO (PUERTO RICO INTERNATIONAL) (ROOSEVELT ROADS) 0.70	22512	22944	22297	2994513	55886.96		4304.83	800.76	
COMMUNITY TOTAL 0.70	22513	22845	22298	2994548	55886.96		4304.83	800.76	
SYRACUSE, NEW YORK (CLARENCE E HANCOCK) 0.35	38798	39530	38497	1499559	11104.11		3817.10		.28
TUCSON, ARIZONA (TUCSON INTL.) 0.38	23066	23357	22744	1525859	3069.07	.34	2404.89		.02
TULSA, OKLAHOMA (TULSA INTL.) 0.33	27647	28071	27419	1388380	6939.15	.29	4931.45		.55
WEST PALM BEACH/PALM BEACH, FLA (PALM BEACH INTERNATIONAL) 0.52	27853	28192	27852	2229254	1858.28	.01	2468.28		.08
OVER-ALL TOTAL, MEDIUM HUBS 18.55	1222714	1243941	1208880	70846403	420178.87	282.42	213186.20	3465.71	.18

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	Nonpriority	
1	2	3	4	5	6	7	8	9	10
AKRON/CANTON, OHIO (AKRON-CANTON) 0.07	6885	7031	6864	316886	139.22			880.19	.04
ALBANY, NEW YORK (ALBANY COUNTY) 0.18	12991	13272	12930	767699	1684.58			2744.11	
ALLENTOWN/BETHLEHEM/EASTON, PA (ALLENTOWN-BETHLEHEM-EASTON) 0.08	6493	6586	6435	283830	1590.88			194.70	16.38
AMARILLO/BORGER, TEXAS (AMARILLO AIR TERMINAL) 0.11	8919	9096	8884	454972	206.31	.03		705.78	
ANCHORAGE, ALASKA (ANCHORAGE INTERNATIONAL) (ELMENDORF AFB) 0.24 0.00	29183	28815	27620	1005785	333942.70			17208.88	43783.91
COMMUNITY TOTAL 0.24	29323	28815	27820	1008807	334888.88			17218.88	43792.70
BATON ROUGE, LOUISIANA (RYAN) 0.09	9405	9475	9362	400314	822.71	.04		387.22	
BILLINGS, MONTANA (LOGAN FIELD) 0.08	7638	7735	7555	257909	382.54			1847.38	
BIRMINGHAM, ALABAMA (BIRMINGHAM MUNI) 0.21	19810	20021	19881	912204	6893.31			2805.28	
BOISE, IDAHO (BOISE AIR TERMINAL/GUNN FLD) 0.13	16982	17356	16821	540985	5895.71			5814.88	
BROWNSVILLE/MARION/SAN BENTO, TEX (HARLINGEN INDUSTRIAL AIRPARK) 0.11 (RIO GRANDE VALLEY INTL.) 0.00	7211	7288	7198	477980	2111.05			.04	2.25
COMMUNITY TOTAL 0.11	3555	359	354	9471	382.00			.04	2.25
BURLINGTON, VERMONT (BURLINGTON INTERNATIONAL) 0.08	8785	8889	8715	361881	1398.45			895.75	

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned revenue tons					Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	10
CEDAR RAPIDS/IAWA CITY, IOWA (CEDAR RAPIDS MUNI) 0.08	12014	12245	11897	384563	8013.05	.03	104.84		
CHARLESTON, SOUTH CAROLINA (CHARLESTON AFB/MUNI) 0.18	14990	15222	14842	680319	1699.19		1320.22	.01	
CHARLESTON/DUNBAR, W. VIRGINIA (KANAWHA) 0.05	8283	8510	8251	221468	462.62		224.47		
CHARLOTTE/AMALIE, VIRGIN IS. US (HARRY S. TRUMAN) 0.08	3931	4048	3913	323440	160.56		215.98		
CHATTANOOGA, TENNESSEE (LOVELL FIELD) 0.08	5313	5357	5269	276100	699.57		928.37	.02	
COLORADO SPRINGS, COLORADO (PETERSON FIELD) 0.18	12381	12559	12126	682285	360.85	.31	121.15		
COLUMBIA, SOUTH CAROLINA (COLUMBIA METROPOLITAN) 0.13	11503	11698	11414	570588	425.89		2142.07		
CORPUS CHRISTI, TEXAS (CORPUS CHRISTI INTERNATIONAL) 0.10	5549	5583	5504	425405	232.73		501.30		
DAYTONA BEACH, FLORIDA (DAYTONA BEACH REGIONAL) 0.09	8170	8200	8120	374058	502.48		213.82		
DES MOINES, IOWA (DES MOINES MUNI) 0.17	18392	18863	18236	739070	963.82	.01	7344.83		
EUGENE, OREGON (MAHLON SWEET FIELD) 0.06	9793	10042	9787	272112	1655.33		671.72		
FARGO, N. D./MOORHEAD, MINNESOTA (HECTOR FIELD) 0.05	3341	3356	3283	217084	179.88		1171.37		
FORT WAYNE, INDIANA (MUNICIPAL/BAER FIELD) 0.06	8412	8321	7988	254423	1129.83		903.18		

TABLE 4-10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned revenue tons						
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	Priority	U.S. Mail	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	9	10
FRESNO, CALIFORNIA (FRESNO AIR TERMINAL) 0.08	8583	8733	8548	337892	920.92			1180.78		.04
GRAND RAPIDS, MICHIGAN (KENT COUNTY) 0.14	11729	11837	11842	808978	3358.21			1514.38		1.43
GREENSBORO/HIGH PT/WINSTN N.C. (GREENSBORO-HIGH PT-WINSTN REG.) 0.24	24887	25385	24983	1026113	11418.13	.01		3332.11		
GREENVILLE & SPARTANBURG, S.C. (GREENVILLE-SPARTANBURG) 0.12	9181	9323	8984	498312	848.93			2157.63		
AGANA, GUAM (AGANA FIELD) 0.08	3218	3108	3072	385108	8843.23	.84		1804.14		20.58
HARRISBURG/YORK, PA. (HARRISBURG INTERNATIONAL) 0.08	10429	10600	10338	398226	6017.74			43.79		
HILO, HAWAII, HAWAII (GENERAL LYMAN FIELD) 0.13	10838	10740	10250	537481	11943.51			1072.25		49.29
HUNTSVILLE/DECATUR, ALABAMA (MADISON COUNTY JETPORT) 0.08	7340	7472	7292	359374	413.21			154.22		
INDIO/PALM SPRINGS, CALIFORNIA (PALM SPRINGS MUNI) 0.07	5908	6055	5923	309988	174.28			44.98		
ISLIP, LONG ISLAND, NEW YORK (LONG ISLAND-MACARTHUR) 0.12	8115	8390	8075	494836	241.84			2020.92		
JACKSON-VICKSBURG, MISS. (ALLEN C THOMPSON FIELD) 0.10	9841	9708	9623	427037	438.74			1742.41		
KAILUA-KONA, HAWAII, HAWAII (KE-APOLE) 0.19	15405	15623	14500	814908	8022.16			857.17		60.05
KNOXVILLE, TENNESSEE (MC GEE TYSKIN) 0.12	11545	11373	11198	520482	5442.30			1568.28		.91

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned revenue tons					Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U.S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	10
LEXINGTON/FRANKFORT, KENTUCKY (BLUE GRASS) 0.08	10534	10698	10493	3368610	486.22				
LINCOLN, NEBRASKA (LINCOLN MUNI) 0.05	8808	8803	8858	228747	158.47	.01	8.52	.15	
LITTLE ROCK, ARKANSAS (ADAMS FIELD) 0.21	15115	15258	15078	879740	778.58		3556.24		
LOUISVILLE, KENTUCKY (STANDIFORD FIELD) 0.24	28810	27194	26870	1034182	8747.83		4814.82	.01	
LUBBOCK, TEXAS (LUBBOCK REGIONAL) 0.12	10427	10532	10409	526230	8711.73		569.78	.04	
MADISON, WISCONSIN (TRUAX FIELD) 0.09	9487	9717	9405	378019	1819.88		1000.08	129.02	
MELBOURNE, FLORIDA (CAPE KENNEDY REGIONAL) 0.06	4450	4463	4387	243711	145.73		15.98	30.89	
MIDLAND/OEDESSA, TEXAS (MIDLAND REGIONAL) 0.13	10439	10541	10418	570184	553.87		33.79		
MOBILE, AL/PASCAGOULA, MISS (BATES FIELD) 0.09	9059	9222	9002	377533	3408.72		379.51	.03	
MOLINE, ILLINOIS/DAVENPORT, IOWA (QUAD-CITY) 0.07	12482	12887	12400	283343	312.17			41.72	
MYRTLE BEACH, SOUTH CAROLINA (MYRTLE BEACH) 0.05	4246	4334	4241	217842	143.80			4.72	
PENSACOLA, FLORIDA (PENSACOLA REGIONAL) 0.08	7849	7744	7808	381973	1238.14			1658.94	
PORTLAND, MAINE (PORTLAND INTERNATIONAL JETPORT) 0.13	8147	8314	8123	574313	2483.35		23.33	1350.87	

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				Foreign mail
	Total performed	Scheduled	Scheduled completed	Enplaned passengers	Freight	Express	U. S. Mail	Nonpriority	
1	2	3	4	5	6	7	8	9	10
PROVIDENCE, RHODE ISLAND (THEODORE FRANCIS GREEN STATE) 0.20	13151	13383	13085	884078	2785.77				
RICHMOND, VIRGINIA (RICHARD E BYRD FLYING FIELD) 0.20	21689	22087	21515	873569	3717.17				
ROANOKE, VIRGINIA (ROANOKE MUNI) 0.05	5719	5858	5672	214998	171.56				
SANTA BARBARA, CALIFORNIA (SANTA BARBARA) 0.05 (SANTA MARIA PUBLIC) 0.00	4738	4798	4728	219426	782.85				
COMMUNITY TOTAL 0.05	5000	5082	4992	219426	939.45				
SARASOTA/BRADENTON, FLORIDA (SARASOTA-BRADENTON) 0.18	12674	12824	12587	761025	513.84	.07			
SAVANNAH, GEORGIA (SAVANNAH MUNI) 0.13	11969	12249	11916	553448	852.70				
SHREVEPORT, LOUISIANA (GREATER SHREVEPORT MUNI) 0.07	6378	8459	8341	315116	5291.78				
SIOUX FALLS, SOUTH DAKOTA (JOE FOSS FIELD) 0.06	7438	7538	7347	248898	920.34				
SOUTH BEND, INDIANA (ST JOSEPH COUNTY) 0.05	8390	8780	8342	229833	2425.91				
SPokane, WASHINGTON (SPOKANE INTERNATIONAL) 0.19	24789	25303	24582	808878	6077.87				
TALLAHASSEE, FLORIDA (TALLAHASSEE MUNI) 0.08	8190	8298	8145	372171	1298.03				
TOLEDO, OHIO (TOLEDO EXPRESS) 0.08	5947	6078	5923	252832	163.05				
								424.37	

TABLE 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 MONTHS ENDED DECEMBER 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures				Enplaned revenue tons				
	Total performed	Scheduled	Enplaned passengers	Freight	Express	U.S. Mail	Priority	Nonpriority	Foreign mail
1	2	3	4	5	6	7	8	9	10
WICHITA, KANSAS (WICHITA MINT) 0.15	15934	16298	15782	654515	9733.28	5.48	2788.52		
OVER ALL TOTAL, SMALL HUBS 7.10	870832	880104	882212	30300694	488204.20	116.18	98183.48	44239.86	44.38

TABLE 4.11
TOP 100 AIRPORTS
IN
RANK ORDER BY TOTAL ENPLANED PASSENGERS
LARGE SCHEDULED CERTIFIED AIR CARRIERS
SCHEDULED AND NONSCHEDULED OPERATIONS
1987

RANK	AIRPORT	TOTAL ENPLANED PASSENGERS	RANK	AIRPORT	TOTAL ENPLANED PASSENGERS
1	Chicago (O'Hare), IL	26,121,921	51	Albuquerque, NM	2,100,688
2	Atlanta, GA	22,649,333	52	Kahului, Maui, HI	2,031,710
3	Dallas/Ft. Worth (Regional), TX	19,904,665	53	Austin, TX	1,928,535
4	Los Angeles, CA	18,369,780	54	Oakland, CA	1,918,014
5	Denver, CO	15,593,583	55	Sacramento, CA	1,749,987
6	San Francisco, CA	13,116,774	56	Buffalo, NY	1,728,690
7	New York (La Guardia), NY	11,326,309	57	Columbus, OH	1,695,005
8	Newark, NJ	11,288,961	58	Milwaukee, WI	1,619,426
9	Boston, MA	10,255,305	59	Reno, NV	1,584,169
10	New York (John F. Kennedy), NY	10,140,009	60	Norfolk, VA	1,550,095
11	St. Louis, MO	9,727,239	61	Tucson, AZ	1,525,859
12	Miami, FL	9,342,215	62	Burbank, CA	1,524,476
13	Detroit, MI	9,254,473	63	Oklahoma City, OK	1,506,126
14	Phoenix, AZ	8,784,880	64	Syracuse, NY	1,499,559
15	Minneapolis/St. Paul, MN	8,710,150	65	Jacksonville, FL	1,407,222
16	Pittsburgh, PA	8,156,015	66	Tulsa, OK	1,388,360
17	Honolulu, Oahu, HI	7,773,253	67	El Paso, TX	1,322,278
18	Washington (National), DC	7,113,121	68	Rochester, NY	1,254,005
19	Orlando, FL	7,074,737	69	Ft. Myers, FL	1,241,995
20	Houston (Intercontinental), TX	6,928,902	70	Lihue, Kauai, HI	1,210,842
21	Las Vegas, NV	6,436,053	71	Omaha, NE	1,072,964
22	Seattle-Tacoma, WA	6,825,552	72	Louisville, KY	1,034,162
23	Philadelphia, PA	6,602,487	73	Greensboro, NC	1,026,113
24	Charlotte, NC	6,021,104	74	Anchorage, AK	1,005,785
25	Memphis, TN	5,623,047	75	Birmingham, AL	912,204
26	Washington (Dulles Int'l), DC	4,916,890	76	Little Rock, AR	879,740
27	San Diego, CA	4,901,362	77	Richmond, VA	873,569
28	Salt Lake City, UT	4,728,595	78	Providence, RI	864,078
29	Tampa, FL	4,681,615	79	Kailua-Kona, Hawaii, HI	814,908
30	Kansas City, MO	4,481,372	80	Spokane, WA	809,878
31	Baltimore, MD	4,009,780	81	Albany, NY	767,609
32	Houston (William P. Hobby), TX	3,929,391	82	Sarasota, FL	761,025
33	Ft. Lauderdale, FL	3,929,293	83	Des Moines, IA	739,070
34	New Orleans, LA	3,311,172	84	Colorado Springs, CO	682,285
35	Cincinnati, OH	3,264,622	85	Charleston, SC	680,319
36	Cleveland, OH	3,102,547	86	Wichita, KS	654,515
37	San Juan, PR	2,994,513	87	Grand Rapids, MI	608,976
38	Nashville, TN	2,987,233	88	Long Beach, CA	605,021
39	Portland, OR	2,834,327	89	Portland, ME	574,313
40	San Jose, CA	2,807,161	90	Columbia, SC	570,566
41	Chicago (Midway), IL	2,542,301	91	Midland, TX	570,164
42	Dallas (Love Field), TX	2,435,525	92	Savannah, GA	553,446
43	San Antonio, TX	2,425,259	93	Boise, ID	540,965
44	Raleigh/Durham, NC	2,316,811	94	Hilo, HI	537,481
45	Indianapolis, IN	2,273,057	95	Lubbock, TX	526,230
46	Hartford, CT	2,267,686	96	Knoxville, TN	520,482
47	Ontario, CA	2,232,486	97	Greenville, SC	498,312
48	West Palm Beach, FL	2,229,254	98	Istip, NY	494,836
49	Dayton, OH	2,166,547	99	Brownsville, TX	477,990
50	Orange County, CA	2,119,964	100	Amarillo, TX	454,972

V. U.S. CIVIL AIR CARRIER FLEET

U.S. air carrier fleet data shown in this chapter were developed from monthly Aircraft/Engine Utilization Reports submitted by air carrier operators. The aircraft population discussed here is not an inventory of the aircraft owned by the air carriers, but represents the aircraft reported in air carrier use during the last quarter of the year.

Prior to 1987, the fleet size was the number of aircraft reported in operation by the carriers in December. Some of the carriers do not report each month. To adjust for this undercount, beginning in 1987, the fleet size is the monthly average of the number of aircraft reported in operation for the last quarter of the year. For example, if the carrier reported for two months, the fleet count is the average for the two months. If the carrier did not report any aircraft in the last quarter, there is no fleet data for that carrier.

TABLE 5.1
TOTAL AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS BY TYPE OF AIRCRAFT:
1978 - 1987

Year	Total	Fixed Wing					Piston	Total Rotary- Wing		
		Total Fixed- Wing	Turbine			Turboprop				
			Total	Turbojet	Turboprop					
1978	2,545	2,542	2,477	2,237	240	65		3		
1979	3,609	3,608	3,052	2,486	566	547		1		
1980	3,808	3,806	3,218	2,531	687	588		2		
1981	3,973	3,969	3,363	2,511	852	603		4		
1982	4,072	4,067	3,501	2,674	827	566		5		
1983	4,203	4,194	3,643	2,767	876	551		9		
1984	4,370	4,358	3,915	2,959	956	443		12		
1985	4,678	4,673	4,240	3,164	1,076	433		5		
1986	4,909	4,907	4,487	3,283	1,204	420		2		
1987	5,253	5,240	4,819	3,575	1,244	421		13		

Note: Beginning in 1987, the number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. Prior to 1987, it was the number of aircraft reported in use during December of the year.

Source: Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Standards National Field Office, Federal Aviation Administration.

TABLE 5.2
AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
TOTAL	5,253	4,909	4,678	4,370	4,204	4,702	3,970	3,808	3,609	2,543
Turbojet--4-engine--										
total	382	322	322	349	309	354	365	441	517	509
Boeing B707	31	35	27	22	24	55	66	146	175	201
Boeing B720	---	---	---	---	1	1	2	3	7	14
Boeing B747	156	150	151	156	146	144	147	144	131	115
British Aerospace Aircraft Groupe										
BAE146	57	25	29	14	3	---	---	---	---	---
Concorde	---	---	---	---	---	---	---	---	9	---
Convair CV22	---	---	---	---	2	2	2	1	---	---
Convair CV30	---	---	---	---	---	1	4	5	6	---
Douglas DC8	138	112	115	157	133	151	144	142	188	178
Lockheed L1329	---	---	---	---	---	---	---	---	1	1
Turbojet--3-engine--										
total	1,469	1,466	1,488	1,438	1,393	1,387	1,363	1,347	1,256	1,146
Boeing B727	1,168	1,172	1,195	1,161	1,122	1,110	1,096	1,092	1,029	931
Douglas DC10	185	180	179	174	155	166	161	153	140	133
Lockheed L1011	116	114	114	103	116	111	106	102	87	82
Turbojet--2-engine--										
total	1,724	1,495	1,354	1,172	1,065	933	783	743	713	582
Airbus A300	52	52	46	38	34	30	25	19	12	6
Airbus A310	13	7	4	---	---	---	---	---	---	---
Boeing B737	633	555	476	391	348	290	236	220	206	173
Boeing B757	95	73	48	19	15	2	---	---	---	---
Boeing B767	83	69	59	53	49	13	---	---	---	---
British Aircraft										
BAC111	39	45	32	33	36	36	27	27	28	30
Canadair CL600	---	---	---	---	---	1	---	---	---	---
Cessna C500/C501	---	---	2	1	1	2	1	5	4	---
Dassault MD10	---	---	---	2	---	---	---	---	---	---
Dassault MD20	---	---	2	9	12	23	27	42	44	---
Douglas DC9	760	643	641	594	557	509	447	394	381	373
Fokker F28	47	50	41	23	6	11	9	5	---	---
Grumman G1159	---	---	---	1	2	3	5	6	---	---
Hamberger Flugzeugbam										
HFB320	---	---	---	1	1	---	---	---	4	---
Hawker-Siddeley										
HS125	---	---	---	---	---	2	---	---	---	---
Israel Aircraft 1123	---	---	---	---	---	---	---	---	1	---
Israel Aircraft 1124	---	---	---	---	---	1	---	1	1	---
Learjet LR23	---	---	---	---	---	3	---	2	5	---
Learjet LR24	---	---	---	---	---	1	3	3	3	---

TABLE 5.2 (continued)
AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Turbojet--2-engine--(cont)										
Learjet LR25	---	---	---	---	---	---	1	7	6	---
Learjet LR35	2	1	3	8	4	3	---	3	4	---
Learjet LR55	---	---	---	---	---	1	---	---	---	---
Rockwell International NA265	---	---	---	---	---	1	---	2	2	---
Sud Aviation SE210	---	---	---	---	1	2	2	5	6	---
Sud Aviation SN601	---	---	---	---	---	---	2	3	---	---
Turboprop--4-engine--										
total	102	96	108	109	99	116	105	92	81	67
Canadair CL44	6	2	6	5	2	4	4	2	1	---
DeHavilland DHC7	41	40	42	46	46	43	29	18	8	---
Lockheed L188	34	33	38	34	37	47	51	52	52	46
Lockheed L382	21	21	22	22	11	19	20	20	20	21
Vickers V745	---	---	---	2	3	3	1	---	---	---
Turboprop--2-engine--										
total	1,139	1,108	965	847	773	707	748	591	484	173
Beech BE65	4	1	---	---	---	---	---	---	---	---
Beech BE90	4	---	3	2	2	4	2	2	3	---
Beech BE99	52	95	103	85	101	108	102	87	85	---
Beech BE100	---	1	1	2	1	---	---	---	---	---
Beech BE200	5	2	1	6	4	2	2	1	4	---
Beech BE1900	48	60	42	17	---	---	---	---	---	---
Beech STC18	---	---	---	1	1	1	---	---	---	---
British Aerospace Aircraft Group										
Jetstream	113	69	46	10	10	12	12	15	16	---
Cessna C441	2	3	1	3	1	2	---	1	---	---
Construcciones Aeronauticas C212	16	19	24	27	26	16	15	21	---	---
Convair CV580/640/600	77	91	100	107	100	98	251	119	120	91
DeHavilland DHC6	71	68	86	107	112	101	96	107	78	13
DeHavilland DHC8	34	26	10	---	---	---	---	---	---	---
Dornier DO228	18	12	6	---	---	---	---	---	---	---
Douglas DC3	---	---	1	---	---	---	---	---	---	---
Embraer EMB110	97	91	79	81	83	83	66	34	4	---
Embraer EMB120	36	16	---	---	---	---	---	---	---	---
Fairchild FH27	13	20	28	23	19	10	8	6	6	7
Fairchild FH227	8	7	8	9	9	9	6	8	22	23
Fokker F27	26	36	27	14	7	4	2	4	---	---
GAF Nomad N22	---	---	---	---	---	2	3	9	---	---
Grumman G159	14	15	23	21	16	19	17	16	15	1
Hawker-Siddeley HS748	---	---	---	2	5	5	2	2	1	1

TABLE 5.2 (continued)
AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Turboprop--2-engine--(cont)										
Israel Aircraft										
AR101B	---	---	---	---	---	3	2	---	---	---
Mitsubishi MU2	1	6	3	1	2	---	---	---	---	---
Nihon YS11	36	36	42	30	35	27	27	22	18	19
Nomad N24	---	---	---	---	---	---	---	---	1	---
Nord ND262	12	15	14	14	9	15	15	22	24	9
Piper 31T	6	5	4	8	6	1	1	---	---	---
Rockwell AC690	1	4	4	4	1	---	---	---	---	---
Saab-Fairchild										
SF340A	51	34	17	3	---	---	---	---	---	---
Short SC7	---	1	1	1	1	2	2	2	---	---
Short SD3	110	110	77	78	66	52	39	34	21	1
S.N.I.A.S. ATR42	20	8	---	---	---	---	---	---	---	---
Swearingen SA226	101	122	113	121	99	105	72	100	66	8
Swearingen SA227	163	135	101	70	55	26	4	---	---	---
Turboprop--1-engine										
total	<u>3</u>	---	---	---	---	---	---	---	---	---
Cessna C208	3	---	---	---	---	---	---	---	---	---
Piston--4-engine--										
total	<u>38</u>	<u>32</u>	<u>38</u>	<u>50</u>	<u>52</u>	<u>58</u>	<u>68</u>	<u>73</u>	<u>58</u>	<u>42</u>
DeHavilland DH114	---	---	---	6	11	17	21	27	7	---
Douglas DC4	---	1	3	3	3	3	6	5	4	2
Douglas DC6	37	30	34	41	38	38	41	41	46	39
Douglas DC7	1	1	1	---	---	---	---	---	---	---
Lockheed L1049	---	---	---	---	---	---	---	---	1	1
Piston--3-engine--										
total	<u>3</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>2</u>	---	---	---	<u>1</u>	---
Britten Norman MK3	3	3	4	4	2	---	---	---	1	---
Piston--2-engine--										
total	<u>380</u>	<u>385</u>	<u>394</u>	<u>389</u>	<u>502</u>	<u>512</u>	<u>536</u>	<u>517</u>	<u>498</u>	<u>21</u>
Aero Commander AC500	---	---	---	---	2	1	1	3	1	---
Aero Commander AC680	---	---	---	---	---	1	1	3	2	---
Beech BE18	5	9	7	15	20	14	20	13	26	---
Beech BE55	2	1	---	---	1	2	2	2	3	---
Beech BE58	7	4	9	9	6	5	3	3	---	---
Beech BE65	2	3	---	---	3	2	4	1	2	---
Beech BE76	---	2	3	3	1	1	---	---	---	---
Beech BE80	---	---	4	8	---	---	---	2	1	---
Beech BE95	---	---	---	---	---	---	1	1	1	---
Beech BE99	---	---	---	---	1	---	---	---	---	---

TABLE 5.2 (continued)
 AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
 1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Piston--2--engine--(cont)										
Beech STC-18	---	---	---	---	---	---	---	5	---	---
Britten-Norman BN2A	29	29	7	27	29	33	35	31	16	---
Britten-Norman BN28	---	---	---	---	---	---	---	---	1	---
Cessna C207T	---	---	---	---	1	1	---	---	---	---
Cessna C303T	1	1	1	2	3	4	5	7	11	---
Cessna C310	1	1	1	2	3	4	5	7	11	---
Cessna C320	---	---	---	1	---	---	---	---	---	---
Cessna C337	---	---	---	---	---	---	---	---	2	---
Cessna C340	---	---	---	---	---	---	1	2	2	---
Cessna C401	---	---	---	---	---	2	---	2	---	---
Cessna C402	143	147	155	112	152	130	131	115	93	1
Cessna C404	4	6	5	4	8	22	17	20	17	---
Cessna C411	---	---	---	1	---	---	1	1	1	---
Cessna C414	---	2	1	1	1	---	3	1	2	---
Cessna C421	---	---	---	1	---	1	---	1	---	---
Convair CV240	10	9	12	15	10	11	12	4	3	---
Convair CV340/CV440	23	17	18	14	22	23	28	23	22	---
Curtiss-Wright C46	---	---	3	2	4	5	12	13	12	10
DeHavilland DHC4	---	---	---	---	---	---	---	1	1	2
DeHavilland DHC104	---	---	---	---	---	---	2	---	2	---
Dornier DO28	---	---	---	---	---	---	2	1	1	---
Douglas DC3	38	43	39	30	42	50	56	68	90	2
Fairchild C82	---	---	---	---	2	1	2	2	2	2
Grumman G21	---	---	3	4	3	3	1	6	1	---
Grumman G44	1	1	1	1	1	1	1	---	---	---
Grumman G73	12	11	3	5	9	9	2	4	---	---
Grumman G111	2	3	6	---	4	2	---	---	---	---
Gulfstream American										
GAC21	---	---	---	---	---	---	---	---	1	---
Martin M404	1	---	---	1	13	11	11	14	20	3
Partenavia PT68	2	---	---	---	---	---	---	---	---	---
Piper PA23	11	9	3	10	16	18	19	26	20	---
Piper PA28	---	---	---	---	7	---	---	---	---	---
Piper PA30	---	---	---	1	2	2	2	2	2	---
Piper PA31	77	73	100	110	121	139	145	126	122	---
Piper PA32	2	---	---	---	---	---	---	---	---	---
Piper PA34	4	9	12	11	17	16	15	12	10	---
Piper PA44	1	1	1	1	1	1	1	1	1	---
Piper PA600	2	2	---	---	---	1	---	1	14	---
Piper PA1020T	---	2	---	---	---	---	---	---	---	---
Helicopters--total	<u>13</u>	<u>2</u>	<u>5</u>	<u>12</u>	<u>9</u>	<u>5</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>3</u>

Note: Beginning in 1987, the number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year. Prior to 1987, it was the number of aircraft reported in use during December of the

Source: Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Standards National Field Office, Federal Aviation Administration.

TABLE 5.3
TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
TOTAL	11,886,280	11,221,587	10,498,546	9,674,406	8,555,580	6,916,349	8,124,998	8,221,961	7,550,657	6,984,395
Turbojet--4-engine-										
total	997,951	921,409	817,058	861,389	816,624	728,412	957,880	1,223,377	1,505,863	1,558,051
Boeing B707	36,206	37,448	15,904	39,243	64,819	83,515	153,877	359,112	539,189	592,885
Boeing B720	---	---	---	136	438	317	438	1,124	18,310	39,072
Boeing B747	575,426	559,137	537,954	537,142	594,573	439,003	531,035	529,314	482,550	418,177
British Aerospace Aircraft Groupe										
BAE146	125,918	92,431	52,452	14,140	1,623	---	---	---	---	---
Concorde	---	---	---	---	---	---	---	415	989	---
Convair CV22	---	---	---	---	---	656	543	71	91	307
Convair CV30	---	---	---	---	---	219	657	1,437	2,092	2,202
Douglas DC8	260,401	232,393	210,748	270,728	245,171	204,702	271,330	331,417	462,053	504,868
Lockheed L1329	---	---	---	---	---	---	---	487	589	540
Turbojet--3-engine-										
total	3,865,525	3,960,406	3,843,357	3,786,832	3,278,501	2,971,583	3,531,243	3,693,218	3,519,847	3,159,647
Boeing B727	2,930,107	3,036,233	2,989,848	2,990,821	2,529,074	2,289,310	2,769,906	2,949,274	2,870,352	2,509,204
Douglas DC10	566,751	580,200	529,073	487,831	423,824	377,811	442,698	441,576	377,434	409,816
Lockheed L1011	368,667	343,973	324,436	308,180	325,603	304,462	318,639	302,368	272,061	240,627
Turbojet--2-engine-										
total	4,575,179	4,057,267	3,568,486	2,872,265	2,494,072	1,751,513	1,817,081	1,715,937	1,641,589	1,575,665
Airbus A300	156,947	150,898	131,904	101,143	84,674	56,390	61,783	43,703	23,843	11,431
Airbus A310	27,234	17,054	5,613	---	---	---	---	---	---	---
Boeing B737	1,730,473	1,489,831	1,312,425	1,006,238	829,359	562,521	585,997	522,556	470,075	412,829
Boeing B757	270,729	195,957	108,320	50,022	17,090	---	---	---	---	---
Boeing B767	274,429	223,227	192,467	172,705	104,222	1,811	---	---	---	---
British Aircraft										
BAC111	84,642	68,908	73,873	59,555	79,011	54,306	58,560	65,194	75,807	76,624
Canadair CL600	---	---	---	---	---	---	---	---	---	---
Cessna C500/C501	54	50	546	657	652	423	1,767	3,773	660	---
Dassault MD10	---	---	2,262	698	---	---	---	---	---	---
Dassault MD20	---	---	4,335	3,218	11,097	18,303	31,559	33,823	47,796	59,448
DeHavilland DHC125	---	---	---	---	---	---	---	---	198	583
Douglas DC9	1,931,391	1,809,888	1,655,353	1,438,339	1,348,511	1,028,836	1,051,747	1,023,200	1,001,148	993,765
Fokker F28	97,727	98,918	73,494	33,036	13,224	23,996	17,123	2,642	---	---
Gruuman G1159	---	---	334	660	309	1,308	2,392	2,774	3,265	2,839
Hamberger Flugzeugbau HFB320	---	---	---	102	734	---	---	1,310	2,363	2,933
Hawker-Siddeley HS125	---	---	---	---	---	304	---	---	---	---
Israel Aircraft 1121	---	---	---	---	8	---	---	---	---	---
Israel Aircraft 1123	---	---	---	---	---	---	---	39	318	269

TABLE 5.3 (continued)

TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL

1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Turbojet--2-engine- (cont)										
Israel Aircraft 1124	---	---	---	---	---	208	86	209	155	83
Learjet LR23	---	---	---	---	1,227	785	1,228	1,658	631	---
Learjet LR24	---	---	---	---	537	436	476	1,160	1,173	229
Learjet LR25	---	---	---	---	---	26	1,007	4,041	3,905	8,036
Learjet LR35	1,553	2,536	7,559	5,892	3,148	688	697	1,700	4,031	4,284
Learjet LR36	---	---	---	---	---	---	---	---	63	190
Learjet LR55	---	---	---	---	---	253	---	---	---	---
Rockwell Interna- tional NA265	---	---	---	---	49	20	46	589	1,179	1,197
Sud Aviation SE210	---	---	---	---	220	899	1,177	5,966	4,959	925
Sud Aviation SN601	---	---	---	---	---	---	1,434	1,600	---	---
Turboprop--4--engine-										
total	181,424	169,884	209,197	216,405	206,435	163,552	186,955	158,687	146,294	140,307
Canadair CL44	9,355	8,687	9,147	7,567	6,066	5,303	4,617	2,155	465	---
DeHavilland DHC7	91,899	73,524	98,315	106,287	103,528	73,069	64,698	31,472	8,905	2,905
Lockheed L188	33,618	38,019	44,765	45,182	47,981	41,594	60,909	69,217	81,280	79,422
Lockheed L382	46,552	49,654	56,597	56,165	47,877	42,250	56,615	55,843	55,644	57,980
Vickers V745	---	---	373	1,204	983	912	116	---	---	---
Vickers V814	---	---	---	---	---	424	---	---	---	---
Turboprop--2--engine-										
total	1,943,532	1,720,179	1,616,425	1,487,032	1,288,616	935,588	1,127,794	948,180	511,966	380,562
Beech BE65	596	639	---	---	---	---	---	---	---	---
Beech BE90	303	158	360	443	626	479	209	537	459	---
Beech BE99	141,691	175,543	199,736	199,205	183,534	137,968	164,467	171,475	45,309	---
Beech BE100	803	259	806	202	13	---	---	255	---	---
Beech BE200	3,625	970	3,541	2,522	1,868	1,813	960	886	2,100	---
Beech BE1900	135,960	107,128	73,211	23,289	---	---	---	---	---	---
Beech STC18	---	982	---	648	632	161	236	---	---	---
British Aerospace Aircraft Group										
Jet Stream	188,315	108,723	60,492	27,712	18,485	16,222	25,836	25,982	9,141	---
Cessna C441	3,874	1,364	1,745	1,672	1,265	501	291	107	---	---
Construcciones Aeronauticas C212	21,643	19,891	24,886	34,252	33,902	21,870	109,613	637	675	256
Convair CV580/600/640	82,371	100,288	113,063	121,399	121,785	104,432	146,867	169,886	169,851	161,440
DeHavilland DHC6	122,783	113,958	162,340	176,233	169,980	139,042	170,458	167,282	59,679	26,766
DeHavilland DHC8	55,680	36,835	7,362	---	---	---	---	---	---	---
Dornier DO228	26,032	16,044	12,306	---	---	---	---	---	---	---
Douglas DC3	---	---	1,478	---	---	---	---	---	---	---
Embraer EMB10	177,781	149,585	156,363	199,536	196,128	127,153	94,790	36,468	614	---
Embraer EMB20	66,054	18,838	---	---	---	---	---	---	---	---
Fairchild FH27	13,502	31,232	36,440	35,521	24,777	12,438	6,132	3,441	5,177	9,514
Fairchild FH227	11,787	13,244	14,491	17,053	19,525	13,341	13,690	17,134	31,926	38,455

TABLE 5.3 (continued)
 TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
 1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Turboprop--2-engine- (cont)										
Fokker F27	59,910	61,144	40,521	25,056	13,151	6,047	3,675	5,196	---	---
GAF Nomad N22	---	---	---	---	69	3,628	10,432	5,546	---	---
Grumman G159	15,177	23,328	23,911	20,773	18,339	8,532	14,643	14,273	12,294	5,842
Hawker-Siddeley HS748	---	---	2,500	7,385	9,320	12,091	4,979	2,564	2,087	2,067
Israel Aircraft ARIOLIS	---	---	---	---	587	2,284	139	---	---	---
Mitsubishi MU2	256	2,980	1,390	314	14	---	---	---	---	---
Nihon YS11	38,093	46,268	53,707	48,246	43,260	25,610	35,737	37,280	43,798	51,925
Nomad N24	---	---	---	---	---	---	---	---	51	---
Nord ND262	23,313	24,860	20,604	20,820	22,446	14,630	21,986	44,857	50,644	51,984
Piper 31T	5,656	4,865	7,003	10,103	2,692	---	70	---	---	---
Rockwell AC690	476	3,057	3,076	2,683	22	---	---	---	---	---
Saab-Fairchild SF340A	98,616	56,392	20,627	386	---	---	---	---	---	---
Short SC7	---	101	315	475	733	520	1,008	489	---	---
Short SD3	217,177	184,680	178,862	150,714	123,385	79,909	77,708	66,606	27,671	13,689
S.N.I.A.S. ATR42	27,943	5,923	---	---	---	---	---	---	---	---
Swearingen SA226	163,994	185,243	217,667	216,716	194,324	169,688	223,059	177,240	50,436	16,642
Swearingen SA227	240,121	225,657	177,622	141,674	87,754	37,209	609	39	54	---
Turboprop--1-engine total	1,240	---								
Beech A36TC	659	---	---	---	---	---	---	---	---	---
Cessna C208	581	---	---	---	---	---	---	---	---	---
Piston--4-engine- total	24,367	24,909	30,854	29,215	33,616	35,782	66,951	70,295	45,007	36,956
DeHavilland DH114	---	---	2,626	7,847	16,835	22,598	42,702	39,110	---	---
Douglas DC4	---	1,038	1,512	720	1,187	256	1,304	3,150	5,934	4,759
Douglas DC6	23,405	23,049	26,039	20,648	15,594	12,928	20,945	28,035	31,006	31,958
Douglas DC7	962	822	677	---	---	---	---	---	---	---
Lockheed L1049	---	---	---	---	---	---	---	---	8,067	239
Piston--3-engine- total	2,477	1,716	5,470	2,983	1,191	---	---	---	---	---
Britten Norman MK3	2,477	1,716	5,470	2,983	1,191	---	---	---	---	---
Piston--2-engine- total	290,738	360,832	402,377	410,287	427,488	324,539	437,955	411,897	177,868	128,623
Aero Commander AC500	---	6	28	300	878	678	789	1,503	104	---
Aero Commander AC680	---	---	---	---	581	759	1,129	892	166	---
Beech BE18	578	345	3,015	9,723	10,721	5,928	8,160	7,521	3,222	31
Beech BE55	---	196	---	284	674	936	981	961	416	---
Beech BE58	2,165	1,727	4,262	2,637	1,430	1,558	1,476	827	99	---
Beech BE65	2,181	5,252	---	---	3,385	1,632	3,435	1,160	286	---
Beech BE76	28	142	525	586	306	78	---	123	---	---

TABLE 5.3 (continued)
 TOTAL FLIGHT HOURS FOR AIRCRAFT REPORTED IN OPERATION BY AIR CARRIERS, BY MANUFACTURER AND MODEL
 1978 - 1987

Aircraft Make and model	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Piston--2-engine-(cont)										
Beech BE80	---	---	7,031	7,667	---	---	591	3,002	455	---
Beech BE95	635	9	---	---	---	95	557	105	32	---
Beech BE99	---	---	---	---	3,719	---	---	---	---	---
Beech STC-18	---	---	---	---	---	---	---	2,769	---	---
Britten-Norman BN2A	19,729	26,166	22,774	28,306	31,204	32,003	39,315	21,239	2,380	---
Britten-Norman BN2B	---	---	---	---	---	---	---	1,407	100	---
Cessna C207T	---	---	---	---	218	60	---	---	---	---
Cessna C210T	---	---	---	45	244	---	---	---	---	---
Cessna C303T	6	---	237	207	---	---	---	---	---	---
Cessna C310	440	490	372	956	1,059	2,573	4,227	2,857	1,157	---
Cessna C320	---	---	8	20	---	---	---	---	---	---
Cessna C337	---	---	---	---	---	---	---	129	38	---
Cessna C340	---	---	---	6	---	18	138	499	244	---
Cessna C401	---	---	---	---	788	513	1,234	630	165	---
Cessna C402	139,843	184,470	191,070	166,914	152,596	103,415	137,504	120,892	23,616	64
Cessna C404	4,022	4,959	4,562	6,730	9,694	14,184	22,977	22,260	2,877	---
Cessna C411	---	---	102	135	---	6	60	470	51	---
Cessna C414	189	1,279	523	522	2,267	15	645	655	94	---
Cessna C421	---	---	46	26	32	26	14	573	---	---
Convair CV240	2,967	3,106	6,284	7,861	6,609	7,399	8,299	3,633	2,067	367
Convair CV340/CV440	6,384	5,584	4,664	6,910	15,932	10,633	17,163	13,744	16,784	12,011
Curtiss-Wright C46	---	411	1,104	966	1,821	2,340	3,358	4,673	8,708	8,708
DeHavilland DHC4	---	---	---	---	---	---	---	91	529	527
DeHavilland DHC104	---	---	---	---	---	489	2,014	1,268	109	---
Dornier DO28	---	---	---	---	---	---	199	400	16	---
Douglas DC3	21,485	25,971	25,916	23,498	21,836	19,649	25,861	32,749	69,964	94,597
Fairchild C82	---	---	6	708	1,252	1,485	2,198	2,127	1,957	1,856
Grumman G10	---	---	---	---	---	1,104	---	---	---	---
Grumman G21	---	787	1,861	1,927	1,453	920	1,309	3,474	154	114
Grumman G44	---	56	110	151	96	80	76	---	---	11
Grumman G73	11,178	10,411	7,979	7,669	7,692	5,004	7,221	3,662	---	---
Grumman G111	1,712	3,476	3,207	4,298	1,817	---	---	---	---	---
Martin M404	10	---	217	5,094	5,732	5,051	9,014	7,604	12,659	10,337
Partenavia PT68	1,362	---	---	---	---	---	---	---	---	---
Piper PA23	5,100	4,113	6,308	4,691	6,656	4,871	9,969	9,996	1,073	---
Piper PA28	---	---	---	---	42	33	---	---	---	---
Piper PA30	---	---	17	460	721	226	392	281	22	---
Piper PA31	67,554	72,782	102,855	114,330	128,305	95,310	118,451	120,618	25,751	---
Piper PA32	698	---	---	---	---	---	---	---	---	---
Piper PA34	981	7,352	7,255	6,660	7,298	5,022	8,853	8,569	1,157	---
Piper PA44	524	418	39	---	259	205	238	938	25	---
Piper PA600	409	321	---	---	169	239	108	7,596	1,189	---
Piper PA1020T	558	1,005	---	---	---	---	---	---	---	---
Helicopters-										
total	3,847	4,985	5,322	7,998	9,037	5,380	1,139	370	2,223	4,564

Source: Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Standards National Field Office, Federal Aviation Administration.

TABLE 5.4

TOTAL LARGE AIRCRAFT REPORTED IN OPERATION by DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED
CARGO AIR CARRIERS AND COMMERCIAL OPERATORS
BY CARRIER, AND BY ENGINE TYPE
1987

Name of Carrier	Total All Aircraft	Turbojet				Turboprop				Piston			
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing
TOTAL	4,231	3,573	382	1,469	1,722	546	102	444	112	38	--	74	--
Aerial Transit	7	---	---	---	---	---	---	---	7	7	---	---	---
Aero Virgin Islands	3	---	---	---	---	---	---	---	3	---	---	3	---
Aero West Airlines dba Royal West Airlines	2	2	2	---	---	---	---	---	---	---	---	---	---
Aeron Intl. Airlines	2	---	---	---	---	2	2	---	---	---	---	---	---
Air Berlin	1	1	---	---	1	---	---	---	---	---	---	---	---
Air Midwest	4	---	---	---	---	4	---	4	---	---	---	---	---
Air Specialties dba Air America	3	3	---	3	---	---	---	---	---	---	---	---	---
Air Train	2	2	2	---	---	---	---	---	---	---	---	---	---
Air Wisconsin dba United Express	28	12	12	---	---	16	---	16	---	---	---	---	---
Airborne Express	38	26	6	---	20	12	---	12	---	---	---	---	---
Airlift International	4	3	3	---	---	1	---	1	---	---	---	---	---
Airways International	2	---	---	---	---	---	---	---	2	---	---	2	---
Alaska Airlines	46	46	---	23	23	---	---	---	---	---	---	---	---
Aloha Airlines	10	10	---	---	10	---	---	---	---	---	---	---	---
America West Airlines	68	65	---	---	65	3	---	3	---	---	---	---	---
American Airlines	409	409	9	224	176	---	---	---	---	---	---	---	---
American Trans Air	18	18	---	18	---	---	---	---	---	---	---	---	---
Amerijet International	4	4	---	4	---	---	---	---	---	---	---	---	---
Arrow Air	5	5	5	---	---	---	---	---	---	---	---	---	---
Aspen Airways	14	3	3	---	---	11	---	11	---	---	---	---	---
Atlantic Southeast Airlines	36	---	---	---	---	36	5	31	---	---	---	---	---
Audi Air	1	---	---	---	---	---	---	---	1	---	---	1	---
Avair dba American Eagle	6	---	---	---	---	6	---	6	---	---	---	---	---
Aviation Associates dba Sunair	11	---	---	---	---	11	---	11	---	---	---	---	---
Braniff	25	25	---	25	---	---	---	---	---	---	---	---	---
Britt Airways dba Britt Airways & Eastern Express	15	---	---	---	---	15	---	15	---	---	---	---	---
Brockway Air VT dba Piedmont Commuter	1	---	---	---	---	1	---	1	---	---	---	---	---
Buffalo Airways	4	4	4	---	---	---	---	---	---	---	---	---	---
Business Air	5	---	---	---	---	---	---	---	5	---	---	5	---
Cape Smythe Air Service	2	---	---	---	---	2	---	2	---	---	---	---	---
Capitol Air Service	2	---	---	---	---	2	---	2	---	---	---	---	---
CCair dba Piedmont Commuter	7	---	---	---	---	7	---	7	---	---	---	---	---
Chalks International	2	---	---	---	---	---	---	---	2	---	---	2	---
Challenge Air Cargo	2	2	2	---	---	---	---	---	---	---	---	---	---
Command Airway	13	---	---	---	---	13	---	13	---	---	---	---	---
Conner Airlines	3	---	---	---	---	---	---	---	3	3	---	---	---
Connie Kalitta Services	8	8	3	4	1	---	---	---	---	---	---	---	---
Continental or Frontier Airlines	287	287	---	85	202	---	---	---	---	---	---	---	---
Crown Airways dba Allegheny Commuter	8	---	---	---	---	8	---	8	---	---	---	---	---
Delta Airlines	367	367	10	176	181	---	---	---	---	---	---	---	---
DHL Airways	5	5	---	5	---	---	---	---	---	---	---	---	---

TABLE 5.4 (continued)

**TOTAL LARGE AIRCRAFT REPORTED IN OPERATION by DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED
CARGO AIR CARRIERS AND COMMERCIAL OPERATORS
BY CARRIER, AND BY ENGINE TYPE
1987**

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston				Rotary
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing
Eager Aviation	1	---	---	---	---	1	---	1	---	---	---	---	---
Eastern Airlines	281	281	---	147	134	---	---	---	---	---	---	---	---
Emerald Air	5	5	---	---	5	---	---	---	---	---	---	---	---
ERA Helicopters dba Jet Alaska	11	---	---	---	---	11	---	11	---	---	---	---	---
Executive Air Charter dba American Eagle	3	---	---	---	---	3	---	3	---	---	---	---	---
Fairway	2	---	---	---	---	2	---	2	---	---	---	---	---
Federal Express	78	78	---	78	---	---	---	---	---	---	---	---	---
Flight Line dba Flight Line & Southern Express	1	---	---	---	---	---	---	---	1	---	---	1	---
Flight Trails dba Air Resorts	7	---	---	---	---	---	---	---	7	---	---	7	---
Florida Airmotive	3	---	---	---	---	---	---	---	3	---	---	3	---
Florida Express	18	18	---	---	18	---	---	---	---	---	---	---	---
Florida West Airlines	2	2	2	2	---	---	---	---	---	---	---	---	---
Flying Tiger Lines	35	35	24	11	---	---	---	---	---	---	---	---	---
Frontier Flying Service	1	---	---	---	---	---	---	---	1	---	---	1	---
General Aviation	6	---	---	---	---	---	---	---	6	---	---	6	---
Grand Canyon	2	---	---	---	---	2	---	2	---	---	---	---	---
Great American Airways	1	1	---	---	1	---	---	---	---	---	---	---	---
Gulf Air	8	8	---	8	---	---	---	---	---	---	---	---	---
Hawaiian Airlines	29	21	6	5	10	8	8	---	---	---	---	---	---
Henson Aviation	27	---	---	---	---	27	6	21	---	---	---	---	---
Holiday Airlines	5	---	---	---	---	5	---	5	---	---	---	---	---
Horizon Air	15	2	---	---	2	13	---	13	---	---	---	---	---
Imperial Aviation	1	---	---	---	---	1	---	1	---	---	---	---	---
Independent Air	4	4	3	1	---	---	---	---	---	---	---	---	---
Intercity Airlines dba Havasu Airlines	1	---	---	---	---	1	---	1	---	---	---	---	---
Intercoastal Airways	2	---	---	---	---	---	---	---	2	---	---	2	---
Interface Group dba Five Star Airlines	2	2	---	2	---	---	---	---	---	---	---	---	---
International Air Services dba Spirit of America Airlines	24	19	---	18	1	5	5	---	---	---	---	---	---
International Parcel Express	2	2	2	---	---	---	---	---	---	---	---	---	---
Interstate Airlines	20	19	15	4	---	1	1	---	---	---	---	---	---
Jet East International Airlines	8	8	---	7	1	---	---	---	---	---	---	---	---
Jet Fleet	1	1	---	---	1	---	---	---	---	---	---	---	---
Key Airlines	7	7	---	7	---	---	---	---	---	---	---	---	---
Lincoln Airlines	2	---	---	---	---	2	---	2	---	---	---	---	---
Markair	9	5	---	---	5	4	4	---	---	---	---	---	---
Maui Airlines dba Maui Airlines & Samoa Air	3	---	---	---	---	3	---	3	---	---	---	---	---
McClain Airlines	1	1	---	1	---	---	---	---	---	---	---	---	---
Mesaba Airlines	6	---	---	---	---	6	---	6	---	---	---	---	---
Metro Express dba Eastern Metro Express	8	---	---	---	---	8	---	8	---	---	---	---	---
Metro Express II dba American Eagle	5	---	---	---	---	5	---	5	---	---	---	---	---
Metroflight dba American Eagle	8	---	---	---	---	8	---	8	---	---	---	---	---

TABLE 5.4 (continued)

TOTAL LARGE AIRCRAFT REPORTED IN OPERATION by DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED
CARGO AIR CARRIERS AND COMMERCIAL OPERATORS
BY CARRIER, AND BY ENGINE TYPE
1987

Name of Carrier	Total All Aircraft	Turbojet				Turboprop				Piston				Rotary
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing	
MGM Grand Air	3	3	---	3	---	---	---	---	---	---	---	---	---	
Mid Pacific Airlines	18	---	---	---	---	18	---	18	---	---	---	---	---	
Midway Airlines	26	26	---	---	26	---	---	---	---	---	---	---	---	
Midway Airlines 1984 dba Midway Express	11	11	---	---	11	---	---	---	---	---	---	---	---	
Midwest Express Airlines	5	5	---	---	5	---	---	---	---	---	---	---	---	
Million Air	2	2	2	---	---	---	---	---	---	---	---	---	---	
Northern Air Cargo	10	---	---	---	---	---	---	---	10	10	---	---	---	
Northwest Airlines	311	298	39	98	161	13	---	13	---	---	---	---	---	
Orion Lift Service	56	56	19	29	8	---	---	---	---	---	---	---	---	
Pacific Alaska Airlines	2	---	---	---	---	2	---	2	---	---	---	---	---	
Pacific Interstate Airlines	1	1	---	1	---	---	---	---	---	---	---	---	---	
Pacific Southwest	60	60	25	---	35	---	---	---	---	---	---	---	---	
Pan Am Express	16	---	---	---	---	16	10	6	---	---	---	---	---	
Pan Am Shuttle	1	1	---	1	---	---	---	---	---	---	---	---	---	
Pan American World Airways	120	120	36	52	32	---	---	---	---	---	---	---	---	
Pandora Enterprises	2	---	---	---	---	---	---	---	2	---	---	2	---	
Pennsylvania Aviation dba Wings Airways	1	---	---	---	---	1	---	1	---	---	---	---	---	
Pennsylvania Commuter Airlines dba Allegheny Commuter	9	---	---	---	---	9	---	9	---	---	---	---	---	
People Express dba Continental Airlines	66	66	8	36	22	---	---	---	---	---	---	---	---	
Piedmont Aviation	179	179	---	34	145	---	---	---	---	---	---	---	---	
Pilgrim Aviation	10	---	---	---	---	10	---	10	---	---	---	---	---	
Pocono Airlines dba Allegheny Commuter	7	---	---	---	---	7	---	7	---	---	---	---	---	
Polar International	1	---	---	---	---	1	---	1	---	---	---	---	---	
Presidential Airways	10	10	8	---	2	---	---	---	---	---	---	---	---	
Princetown Airways	4	---	---	---	---	4	---	4	---	---	---	---	---	
Providence Airlines	2	---	---	---	---	---	---	---	2	---	---	2	---	
Provincetown Boston Airlines	13	---	---	---	---	4	---	4	9	---	---	9	---	
Reeve Aleutian Airways	6	2	---	2	---	4	2	2	---	---	---	---	---	
Renown Aviation	4	---	---	---	---	---	---	---	4	---	---	4	---	
Resort Commuter	3	---	---	---	---	3	---	3	---	---	---	---	---	
Rich International Airways	3	3	3	---	---	---	---	---	---	---	---	---	---	
Rocky Mountain Airways	9	---	---	---	---	9	6	3	---	---	---	---	---	
Rosenbalm Aviation	21	21	21	---	---	---	---	---	---	---	---	---	---	
Ross Aviation	4	---	---	---	---	4	3	1	---	---	---	---	---	
Ryan Air Service	1	---	---	---	---	1	---	1	---	---	---	---	---	
Ryan International Airlines	21	21	---	16	5	---	---	---	---	---	---	---	---	
Salair	8	---	---	---	---	---	---	---	8	---	---	8	---	
Scenic Airlines	12	---	---	---	---	12	---	12	---	---	---	---	---	
Sedalia Marshall Boonville Stage Line	14	---	---	---	---	14	---	14	---	---	---	---	---	
Sierra Pacific Airlines	7	---	---	---	---	7	---	7	---	---	---	---	---	
Simmons Airlines dba American Eagle	37	---	---	---	---	37	---	37	---	---	---	---	---	
Skyfreighters	4	---	---	---	---	---	---	4	---	---	4	---	---	
Skywest Airlines	5	---	---	---	---	5	---	5	---	---	---	---	---	
Skyworld Airlines	10	10	9	1	---	---	---	---	---	---	---	---	---	
South Pacific Island Airways	1	---	---	---	---	1	---	1	---	---	---	---	---	
Southern Air Transport	26	9	9	---	---	17	17	---	---	---	---	---	---	

TABLE 5.4 (continued)

**TOTAL LARGE AIRCRAFT REPORTED IN OPERATION by DOMESTIC, FLAG AND SUPPLEMENTAL/SCHEDULED
CARGO AIR CARRIERS AND COMMERCIAL OPERATORS
BY CARRIER, AND BY ENGINE TYPE
1987**

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston				Rotary
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing
Southern Jersey Airways	8	---	---	---	---	8	2	6	---	---	---	---	---
Southwest Airlines	75	75	---	---	75	---	---	---	---	---	---	---	---
Southwind Airlines	1	---	---	---	---	---	---	---	1	---	---	1	---
Statewest Airlines	4	---	---	---	---	4	---	4	---	---	---	---	---
Suburban Airlines	10	---	---	---	---	10	---	10	---	---	---	---	---
Summit Airlines	5	---	---	---	---	5	---	5	---	---	---	---	---
Sun Coast Airlines	2	2	---	2	---	---	---	---	---	---	---	---	---
Sun Country Airlines	6	6	---	6	---	---	---	---	---	---	---	---	---
Sunbird Air dba Caribbean Air Transport	2	---	---	---	---	---	---	---	2	---	---	2	---
Sunworld Intl. Airways	7	7	---	---	7	---	---	---	---	---	---	---	---
Systems Intl. Airways	1	---	---	---	---	---	---	---	1	---	---	1	---
T P I Intl. Airways	4	1	1	1	---	3	3	---	---	---	---	---	---
Tower Air	4	4	4	4	---	---	---	---	---	---	---	---	---
Trans Air Link	12	---	---	---	---	---	---	---	12	12	---	---	---
Trans Continental Airlines	9	2	2	2	---	---	---	---	7	4	---	3	---
Trans Florida	2	---	---	---	---	---	---	---	2	---	---	2	---
Trans International Air	10	7	7	7	---	3	3	---	---	---	---	---	---
Trans World Airlines	195	195	14	103	78	---	---	---	---	---	---	---	---
Twin Town Leasing	2	---	---	---	---	---	---	---	2	---	---	2	---
United Airlines	374	374	55	214	105	---	---	---	---	---	---	---	---
United Aircraft Sales	1	1	---	1	---	---	---	---	---	---	---	---	---
Universal Airlines	2	---	---	---	---	---	---	---	2	2	---	---	---
USAir	158	158	---	10	148	---	---	---	---	---	---	---	---
Viking Intl. Airlines	4	---	---	---	---	4	---	4	---	---	---	---	---
Virgin Air dba Air St Thomas	1	---	---	---	---	---	---	---	1	---	---	1	---
Walkers Aviation Services	1	---	---	---	---	1	---	1	---	---	---	---	---
Westair Commuter dba United Express	9	---	---	---	---	9	---	9	---	---	---	---	---
World Airways	4	4	---	4	---	4	4	---	---	---	---	---	---
Wrangler Aviation	4	---	---	---	---	4	4	---	---	---	---	---	---
Zentop Intl. Airline	37	7	7	---	---	30	21	9	---	---	---	---	---

Source: Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Standards National Field Office,
Federal Aviation Administration.

Note: The number of aircraft is the monthly average of the number of aircraft reported in use for the last three months
of the year.

Large aircraft--an aircraft with a seating capacity of more than 30 seats or a payload of more than 7,500 pounds.

TABLE 5.5
 TOTAL SMALL AIRCRAFT REPORTED IN OPERATION by COMMUTER AIR CARRIERS AND ON-DEMAND AIR TAXIS
 BY CARRIER, AND BY ENGINE TYPE
 1987

Name of Carrier	Total All Aircraft	Turbojet			Turboprop			Piston			Rotary Wing		
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	
TOTAL	1,022	2	---	---	2	698	---	698*	309	---	3	306	13
40 Mile Air	1	---	---	---	---	---	---	---	1	---	---	1	---
Aero Coach International	25	---	---	---	---	---	---	---	25	---	---	25	---
Air Cape	4	---	---	---	---	---	---	---	4	---	---	4	---
Air Caribe	3	---	---	---	---	---	---	---	3	---	---	3	---
Air Kentucky Airlines dba													
Allegheny Commuter	9	---	---	---	---	9	---	9	---	---	---	---	---
Air Midwest	50	---	---	---	---	50	---	50	---	---	---	---	---
Air Molokai	8	---	---	---	---	---	---	---	8	---	---	8	---
Air Nevada Airlines	8	---	---	---	---	---	---	---	6	---	---	6	---
Air New Orleans dba Air New Orleans & Continental													
Express	7	---	---	---	---	7	---	7	---	---	---	---	---
Air Sunshine	3	---	---	---	---	---	---	---	3	---	---	3	---
Air Tour Acquisition dba													
Panorama Air Tour	10	---	---	---	---	---	---	---	10	---	---	10	---
Airways International	4	---	---	---	---	---	---	---	4	---	---	4	---
Alpine Aviation	3	---	---	---	---	---	---	---	3	---	---	3	---
Atlantic Southeast Airlines	16	---	---	---	---	16	---	16	---	---	---	---	---
Atlantis Airlines dba Eastern													
Atlantis Express	5	---	---	---	---	5	---	5	---	---	---	---	---
Audi Air	5	---	---	---	---	---	---	---	5	---	---	5	---
Avair dba American Eagle	21	---	---	---	---	21	---	21	---	---	---	---	---
Aviation Associates dba													
Sunaire	1	---	---	---	---	---	---	---	1	---	---	1	---
Baker Aviation	1	---	---	---	---	---	---	---	1	---	---	1	---
Baldwin, Daniel dba Wrangell													
Air Service	2	---	---	---	---	---	---	---	2	---	---	2	---
Barrow	1	---	---	---	---	---	---	---	1	---	---	1	---
Bemidji	3	---	---	---	---	1	---	1	2	---	---	2	---
Bering Air	5	---	---	---	---	---	---	---	5	---	---	5	---
Big Island	2	---	---	---	---	---	---	---	2	---	---	2	---
Big Sky Airlines	11	---	---	---	---	8	---	8	3	---	---	3	---
Bo S Aire Airline	2	---	---	---	---	---	---	---	2	---	---	2	---
Britt Airways dba Britt Airways & Eastern Express	19	---	---	---	---	19	---	19	---	---	---	---	---
Brockway Air NY dba													
Piedmont Commuter	11	---	---	---	---	11	---	11	---	---	---	---	---
Brockway Air VT dba													
Piedmont Commuter	4	---	---	---	---	4	---	4	---	---	---	---	---
Business Air	10	---	---	---	---	4	---	4*	6	---	---	6	---
Business Express	15	---	---	---	---	15	---	15	---	---	---	---	---
Cape Smythe Air Service	6	---	---	---	---	---	---	---	6	---	---	6	---
Capitol Air Service	3	---	---	---	---	---	---	---	3	---	---	3	---
Caribbean Express dba													
Presidential One	6	---	---	---	---	---	---	---	---	---	---	---	---
Catskill Airways	3	---	---	---	---	---	---	---	---	---	---	---	---
CCair dba Piedmont Commuter	17	---	---	---	---	---	---	---	---	---	---	---	---
Chalks Intl. Airlines	4	---	---	---	---	---	---	---	---	---	---	---	---

* Includes 3 single engine aircraft.

TABLE 5.5 (continued)
 TOTAL SMALL AIRCRAFT REPORTED IN OPERATION by COMMUTER AIR CARRIERS AND ON-DEMAND AIR TAXIS
 BY CARRIER, AND BY ENGINE TYPE
 1987

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston				Rotary
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing
Chaparral Air Service dba													
American Eagle	8	---	---	---	---	8	---	8	---	---	---	---	---
Christman Air Systems	5	---	---	---	---	5	---	5	---	---	---	---	---
Clearwater Flying Service													
dba Empire Airways	2	---	---	---	---	2	---	2	---	---	---	---	---
Coastal Airlines dba													
National Air	4	---	---	---	---	3	---	3	1	---	---	1	---
Coastal Express	1	---	---	---	---	1	---	1	---	---	---	---	---
Colgan Airways dba													
Continental Express	2	---	---	---	---	2	---	2	---	---	---	---	---
Comair	43	---	---	---	---	43	---	43	---	---	---	---	---
Crown Air	5	---	---	---	---	---	---	---	5	---	---	5	---
Custom Aviation dba Desert													
Sun Airlines	2	---	---	---	---	1	---	1	1	---	---	1	---
DHL Airways	12	1	---	---	---	10	---	10	---	---	---	---	1
Direct Air	1	---	---	---	---	---	---	---	1	---	---	1	---
ERA Helicopters dba													
Jet Alaska	1	---	---	---	---	1	---	1	---	---	---	---	---
Executive Air Charter dba													
American Eagle	13	---	---	---	---	11	---	11	2	---	---	2	---
Express Airlines dba													
Northwest Air Link	34	---	---	---	---	34	---	34	---	---	---	---	---
Fairways	1	---	---	---	---	1	---	1	---	---	---	---	---
Fischer Brothers Aviation													
dba Midway Commuter	9	---	---	---	---	9	---	9	---	---	---	---	---
Flamenco Airways	5	---	---	---	---	---	---	---	5	---	1	4	---
Flight Lines dba Flight													
Line & Southern Express	14	---	---	---	---	7	---	7	7	---	---	7	---
Friendship Air Alaska	3	---	---	---	---	---	---	---	3	---	---	3	---
Frontier Flying Service	6	---	---	---	---	1	---	1	5	---	---	5	---
G P Express	9	---	---	---	---	2	---	2	7	---	---	7	---
General Aviation	7	---	---	---	---	7	---	7	---	---	---	---	---
Great Lakes Aviation	5	---	---	---	---	3	---	3	2	---	---	2	---
Harbor Airlines	4	---	---	---	---	---	---	---	4	---	---	4	---
Hermens Air	3	---	---	---	---	---	---	---	3	---	---	3	---
Horizon Air	25	---	---	---	---	25	---	25	---	---	---	---	---
Imperial Aviation	2	1	---	---	1	---	---	---	1	---	---	1	---
Intercity Airlines dba													
Havasu Airlines	3	---	---	---	---	---	---	---	3	---	---	3	---
International Transfer dba													
Pro Air Service	4	---	---	---	---	---	---	---	4	---	---	4	---
Jetstream International													
Airlines	25	---	---	---	---	25	---	25	---	---	---	---	---
JIB dba Action Air Charters	3	---	---	---	---	---	---	---	3	---	---	3	---
Kenosha Aero dba Alliance													
Airlines	6	---	---	---	---	---	---	---	6	---	---	6	---

TABLE 5.5 (continued)
 TOTAL SMALL AIRCRAFT REPORTED IN OPERATION by COMMUTER AIR CARRIERS AND ON-DEMAND AIR TAXIS
 BY CARRIER, AND BY ENGINE TYPE
 1987

Name of Carrier	Total All Aircraft	Turbojet				Turboprop			Piston				Rotary
		Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	3-eng.	2-eng.	Wing
Kingman Aviation dba Golden													
Pacific Airlines	4	---	---	---	---	---	---	---	4	---	---	4	---
L A B Flying Service	5	---	---	---	---	---	---	---	5	---	---	5	---
Larry's Flying Service	4	---	---	---	---	---	---	---	4	---	---	4	---
Mall Airways	7	---	---	---	---	7	---	7	---	---	---	---	---
Manus Air Transport	1	---	---	---	---	---	---	---	1	---	---	1	---
Mesa Airlines	12	---	---	---	---	12	---	12	---	---	---	---	---
Mesaba Airlines	7	---	---	---	---	7	---	7	---	---	---	---	---
Metro Express II dba													
American Eagle	10	---	---	---	---	10	---	10	---	---	---	---	---
Metro Express dba Eastern													
Metro Express	21	---	---	---	---	21	---	21	---	---	---	---	---
Metroflight dba													
American Eagle	9	---	---	---	---	9	---	9	---	---	---	---	---
Midcontinent Airlines	3	---	---	---	---	2	---	2	1	---	---	1	---
Midstate Airlines	4	---	---	---	---	4	---	4	---	---	---	---	---
Midwest Division of													
Southwest Aviation	3	---	---	---	---	---	---	---	3	---	---	3	---
Montauk Caribbean Airways dba													
Long Island Airlines	4	---	---	---	---	---	---	---	4	---	---	4	---
MST Aviation	3	---	---	---	---	---	---	---	3	---	---	3	---
N E Airlines	3	---	---	---	---	---	---	---	3	---	---	3	---
New York Helicopter	4	---	---	---	---	---	---	---	---	---	---	4	---
Nicholson Air Service dba													
Cumberland Airlines	4	---	---	---	---	---	---	---	4	---	---	4	---
NPA dba United Express	8	---	---	---	---	8	---	8	---	---	---	---	---
Oklahoma Airways dba													
Altus Airlines	3	---	---	---	---	---	---	---	3	---	---	3	---
Omniflight Helicopter Service	5	---	---	---	---	---	---	---	---	---	---	5	---
Peninsula Airways	3	---	---	---	---	3	---	3	---	---	---	---	---
Pennsylvania Aviation dba													
Wings Airways	5	---	---	---	---	---	---	---	5	---	2	3	---
Pennsylvania Commuter													
Airlines dba Allegheny													
Commuter	9	---	---	---	---	9	---	9	---	---	---	---	---
Pilgrim Aviation	5	---	---	---	---	5	---	5	---	---	---	---	---
Pocono Airlines dba													
Allegheny Commuter	1	---	---	---	---	1	---	1	---	---	---	---	---
Precision Valley Aviation dba													
Precision Airlines &													
Eastern Express	12	---	---	---	---	12	---	12	---	---	---	---	---
Presidential Airways	7	---	---	---	---	7	---	7	---	---	---	---	---
Prompt Ait	2	---	---	---	---	---	---	---	2	---	---	2	---
Propheteer Construction	2	---	---	---	---	---	---	---	2	---	---	2	---
Provincetown Boston Airlines	28	---	---	---	---	8	---	8	20	---	---	20	---
Resort Air dba Trans													
World Express	15	---	---	---	---	15	---	15	---	---	---	---	---
Resorts International	2	---	---	---	---	---	---	---	---	---	---	2	---
Rio Airways	2	---	---	---	---	2	---	2	---	---	---	---	---
Rocky Mountain Airways	3	---	---	---	---	3	---	3	---	---	---	---	---
Royale Airlines	10	---	---	---	---	10	---	10	---	---	---	---	---
Ryan Air Service	18	---	---	---	---	3	---	3	15	---	---	15	---
S F O Helicopter Airlines	2	---	---	---	---	---	---	---	1	---	---	1	---
Sallees Aviation	2	---	---	---	---	---	---	---	2	---	---	2	---
San Juan Airlines &													
Pearson Aircraft	12	---	---	---	---	3	---	3	9	---	---	9	---
Set-Air	11	---	---	---	---	11	---	11	---	---	---	---	---
Scenic Airlines	1	---	---	---	---	1	---	1	---	---	---	---	---
Simmons Airlines dba													
American Eagle	5	---	---	---	---	5	---	5	---	---	---	---	---
Skywest Airlines	38	---	---	---	---	38	---	38	---	---	---	---	---

TABLE 5.5 (continued)

TOTAL SMALL AIRCRAFT REPORTED IN OPERATION by COMPUTER AIR CARRIERS AND ON-DEMAND AIR TAXIS
BY CARRIER, AND BY ENGINE TYPE
1987

Name of Carrier	Total All Aircraft		Turboprop			Piston			Rotary Wing	
	Total	4-eng.	3-eng.	2-eng.	Total	4-eng.	2-eng.	Total	4-eng.	2-eng.
South Central Air	10	---	---	---	2	---	2	8	---	8
Stateswest Airlines	2	---	---	---	2	---	2	---	---	---
Temaco Helicopters	1	---	---	---	---	---	---	1	---	1
Tennessee Airways dba										
Iowa Airways	4	---	---	---	3	---	3	1	---	1
Texas National Airlines	3	---	---	---	3	---	3	---	---	---
Trans Colorado Airlines dba										
Continental Express	11	---	---	---	11	---	11	---	---	---
Valley Flying Service	5	---	---	---	---	---	---	5	---	5
Vieques Air Link	9	---	---	---	---	---	---	9	---	9
Virgin Air dba Air St Thomas	10	---	---	---	---	---	---	10	---	10
Virgin Island Seaplane Shuttle	7	---	---	---	---	---	---	7	---	7
Walkers Aviation	1	---	---	---	---	---	1	---	---	1
Westair Commuter dba										
United Express	33	---	---	---	33	---	33	---	---	---
Wings West	32	---	---	---	32	---	32	---	---	---

Source: Air Carrier Aircraft Utilization and Propulsion Reliability Report; Aviation Standards National Field Office, Federal Aviation Administration.

Note: The number of aircraft is the monthly average of the number of aircraft reported in use for the last three months of the year.

Small aircraft--an aircraft with a seating capacity of 30 seats or less or a payload of 7,500 pounds or less.

VI. U.S. CERTIFIED AIR CARRIERS--OPERATING DATA

The traffic and financial data contained in this chapter include data for all U.S. Certificated Air Carriers--those holding a certificate issued under Section 401 of the Federal Aviation Act of 1958; and the commuter air carriers--those holding a certificate under Section 298C of the Federal Aviation Act of 1958.

The data are classified in two broad operational categories: "domestic" and "international". Beginning January 1, 1981, "domestic" encompasses operations within and between the 50 states of the United States, the District of Columbia, the Commonwealth of Puerto Rico and the Virgin Islands. It also encompasses Canadian transborder operations and for certain carriers, Mexican transborder operations. All other categories are considered "international". For periods prior to January 1, 1981, the data are classified in this same manner, except statistics for Puerto Rico and Virgin Islands operations are included in the international category rather than the domestic.

The certificated carriers are also grouped into "large" and "small" according to the size aircraft that the carrier operates. A "large" carrier is one that operates aircraft designed to have a maximum passenger seating capacity of 60 seats or more or a maximum payload capacity of 18,000 pounds or more, or conducts international operations. A "small" certificated carrier operates aircraft of less than 60 seats or a payload capacity of less than 18,000. The commuter carriers are grouped with the small certificated carriers.

The large certificated air carriers, beginning in 1981, were grouped according to their total operating revenue as listed below:

<u>Carrier Groups</u>	<u>Carriers with Annual Operating Revenues of:</u>
Major	\$1,000,000,000+
Nationals	\$75,000,000 - \$1,000,000,000
Large Regionals	\$10,000,000 - \$74,999,999
Medium Regionals	0 - \$9,999,999

The tables in this chapter are divided into two groups: 6.1-6.15 cover the large carriers and 6.16-6.18 cover the small commuter and large certificated medium regional carriers. Please note that some large certificated medium regional carriers are included in both groups of tables. The information for the large air carriers was obtained from the following sources published by the Research & Special Programs Administration of the Department of Transportation.

Air Carrier Traffic Statistics compiled from RSPA Form 41 Schedules T-1(a), T-1(b) and T-1(c).

Air Carrier Financial Statistics compiled from RSPA Form 41 Schedules B-1 and P-1.

The information for the small certificated, commuter and large certificated medium regional carriers was obtained from:

Air Carrier Industry Scheduled Service Traffic Statistics: Medium Regional Section: compiled from RSPA Form 298C Schedules A-1 and T-1.

TABLE 6.1

LARGE CERTIFICATED AIR CARRIERS
1986 AND 1987

<u>MAJORS</u>		<u>NATIONALS</u>	
American	Pan American	Air California	Midway
Continental	Piedmont	Air Wisconsin	New York Air
Delta	Republic	Alaska	Ozark
Eastern	Trans World	Aloha	Pacific Southwest
Federal Express	United	American West	People Express
Flying Tiger	US Air	American Trans Air	Southwest
Northwest	Western	Braniff	Transamerica
		Frontier	TranStar
		Hawaiian	World
		Jet America	Zantop

<u>LARGE REGIONALS</u>			
Air America	Evergreen	Markair	Rosenbalm
Air Atlanta	Five Star	Mid Pacific	Royal West
Arrow	Florida Express	Midwest Express	Ryan
Aspen	Gulf Air Transport	Northern Air	Skystar
Britt	Horizon Air	Pilgrim	Sky World
Emerald	International Air Service	Presidential	Southern Air
Empire	Interstate	Reeve	Sun Country
	Key	Rich	Sunworld
			Tower

<u>MEDIUM REGIONALS</u>			
Aerial	Challenge Air Int'l	Jet East	Samoa
Aeron	Conner	Jet Fleet	Skybus
Amerijet	Florida West	McClain	South Pacific
Atlantic Gulf	Galaxy	MGM Grand	Trans Air Link
Buffalo	Great American	Millon	Trans International
Challenge	Independent Air	Orion	Worldwide
Challenge Air Cargo	Jet Charter	Pacific Interstate	

TABLE 6.2

TRAFFIC DATA, ALL SERVICES (SCHEDULED AND NONSCHEDULED)
OF THE LARGE CERTIFIED AIR CARRIERS
1986 AND 1987

Traffic Category	Total System		Domestic Operations		International Operations	
	1986 (R)	1987 (P)	1986 (R)	1987 (P)	1986 (R)	1987 (P)
Revenue Passenger Miles Flown (000)	378,922,631	417,823,104	307,885,204	329,069,600	71,037,527	88,753,504
Available Seat Miles (000)	623,073,312	670,691,212	505,734,205	532,993,775	117,339,107	137,697,437
Revenue Passenger Enplanements (000)	426,314	455,080	398,422	420,429	27,892	34,651
Revenue Ton Miles Flown (000)*	48,883,854	54,801,863	37,148,059	40,450,441	11,735,795	14,351,422
Passenger	37,895,665	41,762,319	30,792,350	32,911,610	7,103,295	8,850,709
Freight	9,306,296	11,284,774	5,108,514	6,226,749	4,197,782	5,058,025
U.S. Mail	1,648,143	1,720,132	1,246,337	1,311,441	401,806	408,691
Foreign Mail	33,270	34,570	1,062	567	32,208	34,003
Revenue Aircraft Miles Flown (000)	3,672,830	4,177,354	3,421,492	3,646,477	451,338	530,677

* Details may not add to total due to rounding.

(P) Preliminary

(R) Revised

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.3

REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN,
 AND AVERAGE SPEED IN DOMESTIC ALL SERVICES
 OF THE LARGE CERTIFICATED AIR CARRIERS
 1978 - 1987

Year	Revenue Aircraft Departures	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1978	4,874,565	2,249,102	5,449,292	413
1979	5,232,381	2,471,401	6,090,313	406
1980	5,222,879	2,523,375	6,247,795	404
1981	5,099,380	2,442,294	6,080,401	402
1982	4,860,482	2,442,292	5,962,431	410
1983	4,920,125	2,552,942	6,174,957	413
1984	5,358,454	2,875,402	6,970,886	412
1985	5,760,232	3,046,440	7,457,030	409
1986 (R)	6,336,150	3,421,492	8,223,615	416
1987 (P)	6,497,808	3,646,477	8,677,478	420

(R) Revised.

(P) Preliminary.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.4

REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN,
 AND AVERAGE SPEED IN INTERNATIONAL ALL SERVICES
 OF THE LARGE CERTIFICATED AIR CARRIERS
 1978 - 1987

Year	Revenue Aircraft Departures ¹	Revenue Aircraft Miles Flown (000)	Revenue Aircraft Hours Flown	Average Airborne Speed (Miles Per Hour)
1978	301,802	359,260	735,334	489
1979	253,821	387,737	788,598	492
1980	256,415	400,791	819,518	489
1981	229,661	356,270	729,827	488
1982	233,726	362,183	739,820	490
1983	243,029	362,994	740,896	490
1984	241,087	388,794	792,267	491
1985	244,888	415,355	846,197	491
1986 (R)	271,735	451,338	923,641	489
1987 (P)	310,748	530,877	1,080,179	491

(R) Revised.

(P) Preliminary.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.5

TOTAL TON-MILES AVAILABLE IN ALL SERVICES OF THE
LARGE CERTIFICATED AIR CARRIERS
1978 - 1987

(Thousands of Ton-Miles)

Year	Large Certificated Air Carriers		
	Total ¹ System	Domestic Operations	Inter- national Operations
1978	56,869,894	43,557,208	13,312,686
1979	62,545,477	47,339,854	15,205,593
1980	66,162,896	49,396,481	16,763,237
1981	64,244,767	48,669,968	15,574,092
1982	65,769,930	49,757,601	16,012,329
1983	68,778,295	52,724,653	15,920,720
1984	76,298,288	58,942,974	17,355,314
1985	80,565,182	61,337,807	19,227,375
1986 (R)	90,243,958	69,771,737	20,472,221
1987 (P)	98,999,146	75,625,306	23,373,840

¹ Categories may not add to total due to rounding.

(P) Preliminary.

(R) Revised.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.6

REVENUE TON-MILES FLOWN IN ALL SERVICES BY
LARGE CERTIFICATED AIR CARRIERS
1978 - 1987

(Thousands of Tons)

Year	Large Certificated Air Carriers		
	Total ¹	Domestic Operations	International Operations
1978	31,095,184	23,151,995	7,943,189
1979	34,550,392	25,676,130	8,874,792
1980	34,655,519	24,964,909	9,689,068
1981	33,923,495	24,801,224	9,122,094
1982	35,050,938	25,838,708	9,212,230
1983	38,011,227	28,271,465	9,624,208
1984	41,277,948	30,561,436	10,716,512
1985	44,154,779	32,939,216	11,215,563
1986 (R)	48,883,854	37,148,059	11,735,795
1987 (P)	54,801,863	40,450,441	14,351,422

¹ Categories may not add to total due to rounding.

(P) Preliminary.

(R) Revised.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.7

PASSENGER OPERATIONS IN SCHEDULED DOMESTIC OPERATIONS
OF THE LARGE CERTIFICATED AIR CARRIERS
1978 - 1987

Year	Revenue Passenger Enplanements (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor ¹	Average On-Line Passenger Trip Length (Miles)		Average Passenger Revenue Per Passenger Miles (Cents)
					Average On-Line Passenger Trip Length (Miles)		
1978	253,957	182,669,238	299,541,841	61.0	719	8.49	
1979	292,700	208,890,884	332,796,130	62.8	714	8.93	
1980	272,829	200,829,303	346,028,272	58.0	736	11.49	
1981	265,304	198,714,755	346,171,952	57.4	749	12.74	
1982	274,342	210,149,315	359,527,716	58.5	766	12.21	
1983	296,721	226,908,925	379,150,158	59.8	765	12.13	
1984	321,047	243,692,254	422,506,609	57.7	759	12.79	
1985	357,109	270,584,011	445,825,864	60.7	758	12.32	
1986 (R)	393,864	302,089,903	497,990,815	60.7	767	11.18	
1987 (P)	416,468	324,480,986	526,663,456	61.6	779	11.50	

¹ Percent revenue passenger-miles of available seat-miles.

(P) Preliminary.

(R) Revised.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.8

PASSENGER OPERATIONS IN SCHEDULED INTERNATIONAL OPERATIONS
OF THE LARGE CERTIFIED AIR CARRIERS
1978 - 1987

Year	Revenue Passenger Enplanements (000)	Revenue Passenger Miles (000)	Available Seat-Miles (000)	Revenue Passenger Load Factor (Percent) ¹	Average On-Line Passenger Trip Length (Miles)	Average Passenger Revenue Per Passenger Miles (Cents)
1978	20,759	44,111,944	69,208,878	63.7	2,125	7.49
1979	24,163	53,132,491	83,330,299	63.8	2,199	7.66
1980	24,074	54,362,811	86,506,831	62.8	2,258	8.78
1981	20,672	50,173,046	78,725,278	63.7	2,427	9.46
1982	19,760	49,494,555	80,591,490	61.4	2,505	9.57
1983	21,917	54,920,223	85,387,821	64.3	2,506	10.21
1984	23,636	61,423,601	92,816,730	66.2	2,599	9.38
1985	24,913	65,819,010	101,962,568	64.6	2,642	9.80
1986 (R)	25,082	64,455,952	109,445,032	58.9	2,570	10.16
1987 (P)	30,839	79,826,798	121,750,942	65.6	2,589	10.38

¹ Percent revenue passenger-miles of available seat-miles.

(P) Preliminary.

(R) Revised.

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.9

REVENUE AIRCRAFT-MILES FLOWN IN ALL SERVICES
OF LARGE CERTIFICATED AIR CARRIERS: 1978 - 1987

Thousands of Miles

Year	Total ¹	Domestic Operations	International Operations
1978	2,608,362	2,249,102	359,260
1979	2,859,138	2,471,401	387,737
1980	2,924,234	2,523,375	400,791
1981	2,703,219	2,442,294	356,270
1982	2,804,475	2,442,292	362,183
1983	2,922,583	2,552,942	362,994
1984	3,264,196	2,875,402	388,794
1985	3,461,795	3,046,440	415,355
1986 (R)	3,872,830	3,421,492	451,338
1987 (P)	4,177,354	3,646,477	530,877

¹ Details may not add to total due to rounding.

(P) Preliminary.

(R) Revised

Source: "Air Carrier Traffic Statistics" - RSPA

TABLE 6.10
 OPERATING REVENUE OF DOMESTIC OPERATIONS, ALL SERVICES
 LARGE CERTIFIED AIR CARRIERS
 MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
 1978 - 1987
 (Thousands of Dollars)

Year	Total Operating Revenues ¹		Passenger		U.S. Mail (Including Subsidy)		Express and Freight		Excess Baggage		Other
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	
1978	18,189,473	100.0	15,508,727	85.3	335,525	1.8	1,326,842	7.3	22,900	0.1	995,474
1979	21,652,405	100.0	18,719,830	86.5	415,737	1.9	1,455,828	6.7	27,681	0.1	1,033,313
1980	26,403,576	100.0	23,081,487	87.4	529,572	2.0	1,552,836	5.9	32,168	0.1	1,207,184
1981	28,787,566	100.0	25,504,233	88.6	590,746	2.1	1,659,182	5.8	36,101	0.1	997,305
1982	28,727,699	100.0	25,439,640	88.6	571,822	2.0	1,505,035	5.2	42,045	0.1	1,169,148
1983	31,014,393	100.0	27,519,079	88.7	537,234	1.7	1,601,895	5.2	51,967	0.2	1,304,221
1984	35,393,945	100.0	31,436,951	88.8	559,138	1.6	1,715,979	4.8	70,032	0.2	1,611,842
1985	37,628,540	100.0	33,343,005	88.6	740,384	1.9	1,580,914	4.2	76,113	0.2	1,886,123
1986(R)	41,000,506	100.0	33,813,923	82.5	682,643	1.7	4,278,008	10.4	85,438	0.2	2,140,496
1987(P)	45,338,861	100.0	37,306,670	82.3	705,614	1.6	4,837,563	10.7	66,259	0.1	2,420,756
											5.3

¹ Details may not add to total due to rounding.

(P) Preliminary
 (R) Revised

Note: 1976-1981 include financial statistics for medium regionals; data for 1982 and after shown separately on Table 6.14.

Source: "Air Carrier Financial Statistics", Table 1 -- RSPA

TABLE 6.11
OPERATING EXPENSES OF DOMESTIC OPERATIONS, ALL SERVICES
LARGE CERTIFIED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1978 - 1987
(Thousands of Dollars)

		Aircraft Operating Expenses				Ground and Indirect Expense				Net Operating Income or Loss Amount	
		Flight Operations		Maintenance		Depreciation and Amortization					
Total Operating Expenses		Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1978	17,171,530	100.0	5,669,021	33.0	2,154,909	12.5	1,230,885	7.2	8,116,715	47.3	1,017,943
1979	21,522,972	100.0	7,998,440	37.2	2,457,497	11.4	1,372,944	6.4	9,693,961	45.0	129,433
1980	26,409,238	100.0	11,029,423	41.8	2,757,663	10.4	1,560,312	5.9	11,061,841	41.9	-5,662
1981	29,051,130	100.0	12,036,704	41.4	2,821,933	9.7	1,723,406	5.9	12,469,087	42.9	-263,564
1982	29,478,115	100.0	11,529,364	39.1	2,709,440	9.2	1,876,106	6.4	13,363,206	45.3	-750,416
1983	31,185,661	100.0	11,370,479	36.5	2,877,991	9.2	2,107,283	6.8	14,829,909	47.6	-171,268
1984	33,811,742	100.0	12,160,526	36.0	3,175,865	9.4	2,223,275	6.6	16,252,075	48.1	1,582,203
1985	36,610,744	100.0	12,684,018	34.7	3,604,447	9.8	2,318,066	6.3	18,004,213	49.2	1,017,796
1986(R)	39,534,036	100.0	11,368,346	28.5	4,475,473	11.2	2,652,497	6.6	21,437,719	53.7	1,066,470
1987(P)	43,604,509	100.0	12,383,053	28.4	4,877,118	11.2	2,842,202	6.5	23,502,137	53.9	1,734,352

¹ Details may not add to total due to rounding.

(P) Preliminary
(R) Revised

Note: 1976-1981 include financial statistics for medium regionals; data for 1982 and after shown separately on Table 6.14.

Source: "Air Carrier Financial Statistics", Table 1 -- RSPA

TABLE 6.12
OPERATING REVENUE OF INTERNATIONAL OPERATIONS, ALL SERVICES
LARGE CERTIFIED AIR CARRIERS
MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
1978 - 1987
(Thousands of Dollars)

Year	Total Operating Revenues ¹		Passenger		U.S. Mail (Including Subsidy)		Express and Freight		Excess Baggage		Other	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1978	4,702,663	100.0	3,305,236	70.3	107,903	2.3	660,040	14.0	20,020	0.4	610,168	13.0
1979	5,574,590	100.0	4,071,862	73.0	119,948	2.2	755,492	13.6	22,743	0.4	604,546	10.8
1980	6,543,033	100.0	4,777,026	73.0	163,204	2.5	875,682	13.4	24,749	0.4	702,372	10.7
1981	6,390,140	100.0	4,916,469	77.0	165,467	2.6	984,474	15.4	24,654	0.4	299,075	4.7
1982	6,434,904	100.0	4,959,347	77.1	176,930	2.8	989,620	15.4	25,358	0.4	283,448	4.4
1983	7,163,275	100.0	5,604,902	78.2	152,455	2.1	999,405	14.0	23,012	0.3	383,502	5.4
1984	7,974,706	100.0	6,074,406	76.2	157,703	2.0	1,169,259	14.8	27,447	0.3	545,892	6.8
1985	8,302,279	100.0	6,451,324	77.7	160,543	1.9	1,130,050	13.6	27,832	0.3	531,528	6.4
1986(R)	8,621,149	100.0	6,550,550	76.0	153,627	1.8	1,451,488	16.8	28,254	0.3	437,231	5.1
1987(P)	10,790,310	100.0	8,286,941	76.8	179,719	1.7	1,746,443	16.2	32,593	0.3	544,614	5.0

¹ Details may not add to total due to rounding.

(P) Preliminary.

(R) Revised.

Note: 1976-1981 include financial statistics for medium regionals; data for 1982 and after shown separately on Table 6.14.

Source: "Air Carrier Financial Statistics", Table 1 -- RSPA

TABLE 6.13
 OPERATING EXPENSES OF INTERNATIONAL OPERATIONS, ALL SERVICES
 LARGE CERTIFIED AIR CARRIERS
 MAJOR, NATIONAL, AND LARGE REGIONAL GROUPS
 1978 - 1987
 (Thousands of Dollars)

		Aircraft Operating Expenses				Ground and Indirect Expense				Net Operating Income or Loss Amount	
		Total Operating Expenses		Flight Operations		Maintenance		Depreciation and Amortization			
		Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1978	4,355,044	100.0	1,351,126	31.0	498,483	11.5	323,352	7.4	2,182,082	50.1	347,620
1979	5,505,332	100.0	1,960,372	35.6	571,215	10.4	351,700	6.4	2,662,043	47.6	69,258
1980	6,765,623	100.0	2,775,331	41.0	615,982	9.1	385,396	5.7	2,986,914	44.2	-222,590
1981	6,574,441	100.0	2,756,877	42.0	539,605	8.2	382,367	5.9	2,895,591	44.0	-184,300
1982	6,451,807	100.0	2,596,134	40.2	511,795	7.9	396,159	6.1	2,947,719	45.7	-17,103
1983	6,692,776	100.0	2,490,076	37.2	547,741	8.2	388,708	5.8	3,266,252	48.8	470,499
1984	7,484,679	100.0	2,628,664	35.1	676,950	9.0	445,857	6.0	3,733,208	49.9	490,028
1985	7,983,705	100.0	2,738,439	34.4	768,018	9.6	481,560	6.0	3,995,687	50.0	318,574
1986(R)	8,458,084	100.0	2,401,911	28.4	900,784	10.7	517,524	6.1	4,637,866	54.8	163,066
1987(P)	10,121,178	100.0	2,795,221	27.6	1,080,944	10.7	528,835	5.2	5,716,178	56.5	669,133

¹ Details may not add to total due to rounding.
 (P) Preliminary.
 (R) Revised.

Note: 1976-1981 include financial statistics for medium regionals; data for 1982 and after shown separately on Table 6.15.
 Source: "Air Carrier Financial Statistics", Table 1 -- RSPA

TABLE 6.14
 OPERATING REVENUE, SYSTEM, ALL SERVICES
 LARGE CERTIFIED AIR CARRIERS
 MEDIUM REGIONAL GROUP
 1982 - 1987
 (Thousands of Dollars)

Year	Total Operating Revenues		Scheduled Passenger		Non Scheduled Service		Subsidy		Other Transport Related	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
			Scheduled Other	Other						
1982	448,159	100.0	154,261	34.5	39,690	8.9	207,558	46.3	6,030	1.3
1983	108,082	100.0	19,126	17.7	9,897	9.2	73,669	68.0	2,132	2.0
1984	159,837	100.0	61,966	38.8	7,063	4.4	83,249	52.1	1,561	1.0
1985	150,754	100.0	38,045	25.2	19,467	12.9	89,563	59.6	0	0.0
1986 (R)	81,971	100.0	10,576	12.9	43	0.0	61,729	75.4	0	0.0
1987 (P)	60,509	100.0	0	0.0	4,485	7.4	54,443	90.0	0	0.0
									1,580	2.6

Source: "Air Carrier Financial Statistics", Table 3 -- RSPA

Note: Wide fluctuations in total revenues and expenses are caused by fluctuations in the number of medium regional carriers. Some have been upgraded to large regional carriers and some have gone out of business. For list of medium regional carriers see "Air Carrier Financial Statistics" for year in question.

TABLE 6.15

OPERATING EXPENSES, SYSTEM, ALL SERVICES
 LARGE CERTIFICATED AIR CARRIERS
 MEDIUM REGIONAL GROUP
 1982 - 1987
 (Thousands of Dollars)

Year	Total Operating Expenses		Flying Operations		Maintenance		General and Administrative		Depreciation and Amortization		Transport Related	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1982	467,998	100.0	242,231	51.8	52,816	11.2	122,861	26.3	19,791	4.2	30,299	6.5
1983	111,713	100.0	68,130	61.0	17,693	15.8	18,327	16.4	7,353	6.6	210	0.2
1984	159,680	100.0	89,995	56.4	21,572	13.5	37,666	23.7	9,885	6.2	361	0.2
1985	151,527	100.0	79,920	52.8	22,585	14.9	42,703	28.2	5,179	3.4	1,140	0.7
1986 (R)	87,359	100.0	45,435	52.0	14,515	16.6	17,436	20.0	2,616	3.0	7,356	8.4
1987 (P)	62,198	100.0	32,514	52.3	11,876	19.1	12,391	19.9	2,340	3.8	3,077	4.9

Source: "Air Carrier Financial Statistics", Table 3 -- RSPA

Note: Wide fluctuations in total revenues and expenses are caused by fluctuations in the number of medium regional carriers. Some have been upgraded to large regional carriers and some have gone out of business. For list of medium regional carriers see "Air Carrier Financial Statistics" for year in question.

TABLE 6.16
SMALL CERTIFICATED AND COMMUTER AIR CARRIERS
1986 and 1987

40-Mile Air	California Seaboard	Golden State Airlines
AAA	Cape Smythe Air Service	Grand Canyon
AAE Western Skyways	Capitol Airline	Grand Canyon Helicopters
Action Airlines	Caribbean Express, Inc.	Great Lakes Aviation, Ltd.
Aerial Transit Company*	Catskill Airways, Inc.	Green Hills Aviation, Ltd.
Aero Coach	Centennial Airlines	Gull Air, Inc.
Aero Virgin Islands Corp.	CCair	Harbor Air Service
Air Cape	Chalks Int'l Airlines, Inc.	Harbor Airlines, Inc.
Air Kentucky Air Lines	Challenge Air Cargo, Inc.*	Havasu Airlines
Air LA	Challenge Air Int'l Inc.*	Helitrans
Air Link Airways	Challenge Air Transport, Inc.*	Henson Aviation, Inc.
Air Midwest, Inc.	Channel Flying, Inc.	Holiday Airlines, Inc.
Air Molakai	Chaparral Airlines, Inc.	Iliamna Air Taxi
Air Nevada Airlines, Inc.	Chautauqua Airlines, Inc.	Iowa Airways
Air New Orleans	Chester County Aviation	Island Air Express
Air Sunshine, Inc.	Chitina Air Service	Jetstream Int'l Airlines
Air-Lift Associates, Inc.	Christman Air System	Kenmore Air Harbor
Airways International	Cityhop	King Flying Service
Alaska Island Air, Inc.	Coastal Air Transport	L.A.B. Flying Service, Inc.
Alliance Airlines	Comair, Inc.	LA Helicopter
Alpha Air	Command Airways, Inc.	Larry's Flying Service
Alpine Air	Crown Airways, Inc.	Las Vegas Airlines
Altus Airlines	Crownair	Long Island Airlines
Ana Ltd.	Cumberland Airlines	Mall Airways, Inc.
Arctic Circle Air Service	Desert Sun Airlines	Manu'a Air Transport, Inc.
Armstrong Air Service	Direct Air, Inc.	Maui Airlines
Atlantic Gulf Airlines*	East Hampton Aire, Inc.	McClair Airlines, Inc.
Atlantic Southeast Airlines	Ellis Air Taxi, Inc.	Mesa Airlines
Atlantis Airlines, Inc.	Empire Airways	Mesaba Aviation
Audi Air, Inc.	ERA Helicopters, Inc.	Metro Express
Avair	Exec Express	Metro Express II
Bader Express	Executive Air Charter	Metroflight Airlines
Baker Aviation, Inc.	Executive Transport	MGM Grand Air*
Bankair, Inc.	Express Airlines I	Michigan Airways, Inc.
Bar Harbor Airways	Fischer Bros. Aviation, Inc.	Midcontinent Airlines
Barrow Air	Flamenco Airways, Inc.	Midstate Airlines, Inc.
Bas Aviation	Florida West Airlines*	Midwest Aviation
Bellair, Inc.	Ford-Aire, Inc.	MST Aviation
Bemidji Airlines	Freedom Air	New England Airlines, Inc.
Bering Air, Inc.	Friendship Air Alaska	New York Helicopter Corp.
Big Island Air	Frontier Flying Service	Northeastern Int'l Airways
Big Sky Airlines, Inc.	Galena Air Service	NPA Inc.
Brockway Air	GT Express Airlines	Omniflight Helicopters
Business Express Airlines	Golden Pacific Airlines	Otter Air

*Large certificated medium regional air carrier.

TABLE 6.16 (Continued)
 SMALL CERTIFICATED AND COMMUTER AIR CARRIERS
 1985 and 1986

Pacific Interstate Airlines*	Rosenbaum Aviation, Inc.	Temco Airlines
Panorama Air Tours	Ross Aviation, Inc.	Tennessee Airways, Inc.
Peninsula Airways, Inc.	Royal Hawaiian Airways, Inc.	Texas National Airlines
Pennsylvania Airlines	Royale Airlines, Inc.	Trans Air, Inc.*
Pocono Airlines, Inc.	Ryan Air Services, Inc.	Trans-Colorado Airlines
Polar International	SFO Helicopter Airlines, Inc.	Tropical Helicopter Airways
Precision Valley Aviation	San Juan Airlines, Inc.	Valley Airlines
Presidential Express	Scenic Airlines, Inc.	Vieques Air Link, Inc.
Prime Air, Inc.	Simmons Airlines	Village Aviation
Princeville Airways, Inc.	Sky West Aviation, Inc.	Virgin Air, Inc.
Pro Air Services	Skybus, Inc.*	Virgin Islands Seaplane
Prophetor Aviation	South Pacific Island Airway*	Walker's International
Provincetown Boston	Southcentral Air, Inc.	West Penn Commuter
Ransome Airlines	Southern Airways	Wheeler Airlines
Reeves Air	Southern Jersey Airways	Wilbur's Inc.
Resort Air, Inc.	States West Airlines	Wings Airways
Resort Airlines, Inc.	Suburban Airlines	Wings West
Resort Commuter	Sunaire	Wings of Alaska
Resorts Int'l Airline	Sun Coast Airlines, Inc.	Wrangell Air Service
Rio Airways, Inc.	Tanana Air Service	Wright Air Service
Rocky Mountain Airways, Inc.	Tanotduak Flying Service	Yute Air Alaska, Inc.

*Large certificated medium regional air carrier.

TABLE 6.17

SMALL CERTIFICATED, COMMUTER AND LARGE CERTIFICATED MEDIUM REGIONAL AIR CARRIERS
 TRAFFIC DATA
 SCHEDULED SERVICES ONLY

1981-1987

Category	1981	1982	1983	1984	1985	1986(R)	1987(P)
Revenue Passenger Miles (000)	2,160,350	2,905,243	2,228,453	4,601,837	3,031,817	3,352,187	3,910,256
Revenue Enplanements (000)	15,642	17,444	15,941	20,230	18,853	20,849	24,066
Passenger Ton Miles (000)	210,026	286,608	222,189	460,135	302,783	335,264	389,259
Cargo Ton Miles (000)	32,812	30,911	7,752	18,291	67,400	49,927	53,966
Aircraft Revenue Miles (000)	254,682	264,176	242,120	304,217	323,945	347,181	382,974
Aircraft Revenue Hours	1,558,025	1,504,406	1,464,879	1,759,846	1,832,623	1,940,095	2,113,753
Aircraft Departures	2,341,469	2,353,081	2,287,504	2,706,142	2,755,616	2,866,653	2,975,052

(R) Revised

(P) Preliminary

Source: "Air Carrier Industry Scheduled Traffic Statistics", RSPA

TABLE 6.18

SMALL CERTIFICATED, COMMUTER AND LARGE CERTIFICATED MEDIUM REGIONAL AIR CARRIERS
 TRAFFIC AVERAGES
 SCHEDULED SERVICES ONLY

1981-1987

Category	1981	1982	1983	1984	1985	1986(R)	1987(P)
Passengers Per Aircraft Mile	8.5	11.0	9.2	15.1	9.4	9.7	10.2
Available Seats Per Aircraft Mile	18.2	23.7	20.7	30.0	21.3	21.5	22.0
Revenue Tons Per Aircraft Mile	1.0	1.2	1.0	1.6	1.1	1.1	1.2
Available Tons Per Aircraft Mile	2.1	2.8	2.3	3.3	2.7	2.5	2.7
Flight Stage Length (Miles)	108.8	112.3	105.8	112.3	117.6	128.7	121.1

(R) Revised

(P) Preliminary

Source: "Air Carrier Industry Scheduled Traffic Statistics", RSPA

VII. U.S. CIVIL AIRMEN

Statistics pertaining to airmen, both pilot and nonpilot, were obtained from the official airmen certification records maintained by the Airmen Certification and Medical Certification Branches of the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma.

Active pilots are those pilots who hold a pilot certificate and a valid medical certificate--one that was issued within the last 25 months. Glider and Lighter-than-air pilots may have, but are not required to have, a medical examination. The inventory data for these categories include only those with a valid medical certificate.

For those nonpilot certificates for which a medical certificate is not required (mechanics, parachute riggers, ground instructors, and dispatchers), the numbers shown include all who have been issued that airman certificate.

TABLE 7.1
ESTIMATED ACTIVE PILOT CERTIFICATES HELD: DECEMBER 31, 1978 ~ 1987

Category	1978	1979	1980 ^{1/}	1981	1982	1983	1984	1985	1986	1987
Pilot—Total	798,833	814,667	827,071	764,182	733,255	718,004	722,376	709,540	709,118	699,653
Student	204,874	210,180	199,833	179,912	156,361	147,197	150,081	146,652	150,273	146,016
Private	337,644	343,276	357,479	326,562	322,094	318,643	320,086	311,086	305,736	300,949
Commercial	185,833	182,097	183,442	166,580	165,093	159,495	155,929	151,632	147,798	143,645
Airline Transport	55,881	63,652	69,569	70,311	73,471	75,938	79,192	82,740	87,186	91,287
Helicopter (only)	4,874	5,218	6,030	6,453	7,034	7,237	7,532	8,123	8,581	8,702
Glider (only) ^{2/}	6,541	6,796	7,039	7,388	7,842	8,157	8,390	8,168	8,411	7,901
Lighter-than-air ^{2/}	3,186	3,448	3,679	2,976	1,360	1,337	1,166	1,139	1,133	1,153
Nonpilot—Total	336,962	351,981	368,356	382,840	399,661	413,199	426,802	395,139	410,079	427,962
Mechanic ^{3/}	226,743	237,611	250,157	262,705	277,436	288,335	298,028	274,100	284,241	297,178
Parachute Rigger ^{3/}	9,200	9,381	9,547	9,716	9,893	10,074	10,194	9,395	9,535	9,659
Ground Instructor ^{3/}	57,738	59,680	61,550	63,246	65,004	66,385	67,463	58,214	59,443	60,861
Dispatcher ^{3/}	6,161	6,446	6,799	7,094	7,580	8,223	8,980	8,511	9,025	9,491
Flight Navigator	2,092	1,994	1,936	1,785	1,695	1,636	1,603	1,542	1,512	1,445
Flight Engineer	33,028	36,869	38,367	38,294	38,053	38,546	40,534	43,377	46,323	49,328
Flight Instructor Certificates ^{4/}	52,201	54,398	60,440	57,523	62,492	62,201	61,173	58,940	57,355	60,316
Instrument Ratings ^{5/}	236,312	247,096	260,461	252,535	255,073	254,271	256,584	258,559	262,386	266,122

^{1/} For 1980 only, a valid medical certificate was defined as one that was issued within the last 27 months.

^{2/} Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

^{3/} Numbers represent all certificates on record. No medical examination required.

^{4/} Not included in total.

^{5/} Special ratings shown on pilot certificates, do not indicate additional certificates.

TABLE 7.2
ESTIMATED ACTIVE WOMEN PILOT CERTIFICATES HELD: DECEMBER 31, 1976 - 1987

Category of Certificates Held	1978	1979	1980 ^{1/}	1981	1982	1983	1984	1985	1986	1987
Pilot—Total	49,874	51,733	52,902	47,721	45,305	43,648	44,339	43,463	43,082	42,578
Student	26,354	26,714	26,006	22,591	19,958	18,696	19,435	19,058	18,899	18,367
Private	19,267	20,275	21,554	19,602	19,388	18,801	18,616	17,974	17,532	17,349
Commercial	3,306	3,618	3,993	4,101	4,257	4,281	4,232	4,155	4,176	4,208
Airline Transport	270	361	480	584	749	884	1,032	1,184	1,334	1,538
Helicopter (only)	17	27	55	87	113	144	167	196	232	247
Glider (only) ^{2/}	433	461	496	540	574	599	631	653	667	627
Lighter-than-air ^{2/}	227	277	318	216	266	243	226	233	242	242
Nonpilot—Total	3,984	4,350	4,779	5,201	5,697	6,151	6,591	6,017	6,502	7,101
Mechanic ^{3/}	600	695	890	1,051	1,296	1,493	1,649	1,775	1,964	2,237
Parachute Rigger ^{3/}	544	553	562	580	593	605	614	412	414	428
Ground Instructor ^{3/}	2,682	2,852	3,015	3,213	3,391	3,554	3,680	2,980	3,067	3,232
Dispatcher ^{3/}	76	105	141	167	199	249	310	394	460	524
Flight Engineer	82	145	171	189	215	248	336	455	577	680
Flight Navigator	0	0	0	1	1	2	2	1	0	0
Flight Instructor ^{4/}	1,458	1,699	2,079	2,165	2,532	2,685	2,736	2,731	2,687	2,909

Note: Instrument ratings not reported.

^{1/} For 1980 only, a valid medical certificate was defined as one that was issued within the last 27 months.

^{2/} Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

^{3/} Numbers represent all certificates on record. No medical examination required.

^{4/} Not included in total.

TABLE 7.3

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1987

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. 2/
Total—All Pilots	699,653	10,685	35,584	91,723	116,254	34,175	65,664	116,661	85,537	124,484	18,886
Student Pilots—Total	146,016	1,993	6,312	21,912	24,838	8,565	13,136	24,634	16,719	24,720	3,185
Private Pilots—Total	300,949	5,013	18,187	37,768	56,665	14,413	26,745	45,591	36,131	55,220	3,216
Private Airplane (only)	290,694	4,670	17,779	36,209	55,308	13,954	27,702	43,797	34,946	53,124	3,005
Private Airplane, Private Glider	4,105	34	148	716	636	189	374	625	391	953	45
Private Airplane, Commercial Glider	795	4	26	153	113	60	101	82	71	161	4
Private Airplane, Private Gyroplane	29	0	2	4	7	1	0	2	7	6	0
Private Airplane, Private Helicopter	1,316	16	60	154	165	78	152	214	180	260	37
Private Airplane, Private Glider, Private Helicopter	55	0	1	8	9	5	4	8	6	12	2
Private Airplane, Commercial Helicopter	3,904	88	171	522	424	126	399	850	527	675	122
Private Airplane, Private Glider, Commercial Helicopter	37	0	0	5	1	0	12	8	3	7	1
Private Airplane, Commercial Glider, Commercial Helicopter	12	1	0	3	0	0	1	5	0	2	0
Private Airplane, Commercial Gyroplane, Commercial Helicopter	2	0	0	0	2	0	0	0	0	0	0
Commercial Pilots—Total	143,645	2,586	7,312	17,857	21,219	5,885	13,225	25,634	16,958	25,253	5,716
Commercial Airplane (only)	121,934	2,237	6,405	14,806	18,853	5,034	11,018	20,998	16,105	21,078	5,395
Commercial Airplane, Private Glider	2,070	22	90	321	268	77	236	333	225	476	20
Commercial Airplane, Commercial Glider	3,777	25	146	585	515	207	442	602	420	803	32
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0

TABLE 7.3 (Continued)

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1987

Class of Certificate	Total <u>1/</u>	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. <u>2/</u>
Commercial Airplane, Private Helicopter	274	6	11	39	51	9	26	43	33	48	8
Commercial Airplane, Commercial Glider, Private Helicopter	18	0	0	4	4	1	0	1	1	6	1
Commercial Airplane, Commercial Helicopter	14,778	284	635	1,982	1,432	517	1,416	3,521	2,094	2,646	249
Commercial Airplane, Private Glider, Commercial Helicopter	152	0	3	23	25	6	13	32	13	33	4
Commercial Airplane, Commercial Glider, Commercial Helicopter	527	11	20	93	60	28	65	95	61	147	7
Commercial Airplane, Commercial Helicopter, Commercial Cyroplane	20	1	1	2	5	0	3	4	1	3	0
Commercial Airplane, Commercial Gyroplane	24	0	1	1	4	1	5	4	4	4	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	10	0	0	1	1	2	0	1	1	4	0
Airline Transport Pilots—Total	<u>91,287</u>	<u>962</u>	<u>3,226</u>	<u>11,165</u>	<u>11,560</u>	<u>4,402</u>	<u>8,696</u>	<u>17,764</u>	<u>11,800</u>	<u>15,445</u>	<u>6,265</u>
Airline Transport Airplane (only)	89,694	927	3,192	10,890	11,421	4,297	8,569	17,461	11,526	15,192	6,219
Airline Transport Airplane, Airline Transport Helicopter	1,593	35	34	275	139	105	129	303	274	253	46
Rotorcraft (only) Pilots—Total	<u>6,702</u>	<u>107</u>	<u>365</u>	<u>1,293</u>	<u>772</u>	<u>419</u>	<u>661</u>	<u>2,271</u>	<u>1,211</u>	<u>1,242</u>	<u>361</u>
Private Gyroplane	10	0	0	0	1	1	2	2	1	2	1
Private Helicopter	1,019	6	33	136	96	130	103	96	94	263	62
Commercial Helicopter	7,228	90	325	1,109	649	273	528	2,163	997	932	222
Commercial Helicopter, Private Glider	5	0	0	2	0	1	0	2	0	0	0
Commercial Helicopter, Commercial Glider	5	0	2	0	1	0	0	0	0	2	0
Commercial Gyroplane	1	0	1	0	0	0	0	0	0	0	0

TABLE 7.3 (Continued)

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1987

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New Eng Land	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. 2/
Commercial Helicopter, Commercial Copter	1	0	0	0	0	0	0	0	1	0	0
Airline Transport Helicopter	433	11	4	46	25	14	28	68	116	43	76
Glider (only)—Total	<u>7,901</u>	<u>16</u>	<u>116</u>	<u>1,562</u>	<u>981</u>	<u>438</u>	<u>1,071</u>	<u>624</u>	<u>546</u>	<u>2,411</u>	<u>134</u>
Private Glider	6,734	13	103	1,317	849	359	830	551	463	2,132	117
Commercial Glider	1,167	3	13	245	132	79	241	73	85	279	17
Lighter-Than-Air	<u>1,153</u>	<u>8</u>	<u>66</u>	<u>166</u>	<u>219</u>	<u>53</u>	<u>126</u>	<u>143</u>	<u>170</u>	<u>193</u>	<u>9</u>
Total—All Nonpilot	<u>427,962</u>	<u>4,427</u>	<u>21,403</u>	<u>61,836</u>	<u>55,620</u>	<u>16,652</u>	<u>35,786</u>	<u>72,847</u>	<u>55,489</u>	<u>81,619</u>	<u>19,883</u>
Mechanic 3/	297,178	3,107	16,607	44,337	38,060	12,782	22,802	48,420	39,362	58,278	13,423
Parachute Rigger 3/	9,659	149	420	1,638	1,219	344	1,299	1,849	978	1,602	161
Ground Instructor 3/	60,861	717	3,047	8,426	9,635	2,680	5,490	10,290	8,130	10,956	1,490
Dispatcher 3/	9,491	142	145	1,931	879	244	471	1,688	662	1,421	1,908
Flight Navigator	1,445	4	11	232	41	163	147	241	87	418	101
Flight Engineer	49,328	308	1,173	5,272	5,986	2,439	5,577	10,359	6,270	9,144	2,800
Flight Instructor Certificates— Total 4/	<u>60,316</u>	<u>795</u>	<u>3,100</u>	<u>8,595</u>	<u>10,331</u>	<u>2,768</u>	<u>5,980</u>	<u>10,097</u>	<u>7,667</u>	<u>10,087</u>	<u>893</u>
Instrument Ratings 5/	<u>266,122</u>	<u>3,489</u>	<u>12,145</u>	<u>34,659</u>	<u>39,753</u>	<u>12,019</u>	<u>23,677</u>	<u>49,879</u>	<u>34,035</u>	<u>46,136</u>	<u>10,328</u>

1/ Includes Outside U.S. total.

2/ Outside U.S. includes airmen certificated by the FAA who live outside the 50 states or foreign countries.

3/ Total ratings issued to date. These ratings retain their validity without periodic medical examinations.

4/ Not included in total.

5/ Special ratings shown on pilot certificates, do not indicate additional ratings.

TABLE 7.4

ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1987

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Total ^{1/}	699,653	146,016	300,949	143,645	91,287	17,756	60,316
United States—Total	680,767	142,831	297,733	137,929	85,022	17,252	59,423
Alaskan Region—Total	10,685	1,993	5,013	2,586	962	131	798
Central—Total	35,584	6,312	18,187	7,312	3,226	547	3,100
Iowa	7,619	1,371	4,323	1,414	423	88	634
Kansas	9,799	1,491	5,124	2,135	905	144	871
Missouri	12,781	2,492	5,973	2,490	1,580	246	1,116
Nebraska	5,385	958	2,767	1,273	318	69	399
Eastern—Total	91,723	21,912	37,768	17,857	11,165	3,021	8,595
Delaware	1,643	353	674	354	232	30	190
District of Columbia	666	156	281	137	55	37	51
Maryland	10,037	2,266	4,417	1,948	1108	298	896
New Jersey	14,921	3,507	5,966	2,684	2,279	485	1,411
New York	25,688	6,596	10,866	4,854	2,284	1,088	2,293
Pennsylvania	20,861	5,124	8,938	3,616	2,596	585	2,130
Virginia	15,374	3,241	5,430	3,825	2,432	446	1,405
West Virginia	2,533	669	1,196	437	179	52	219
Great Lakes—Total	116,254	24,838	56,665	21,219	11,560	1,972	10,331
Illinois	27,229	6,036	12,411	4,788	3,528	466	2,522
Indiana	12,479	2,766	6,237	2,327	960	189	1,145
Michigan	20,348	4,510	10,172	3,500	1,689	477	1,751
Minnesota	16,188	3,095	7,810	2,910	2,199	174	1,344
North Dakota	3,293	692	1,597	888	93	23	255
Ohio	22,565	4,940	11,029	4,170	1,947	479	2,154
South Dakota	2,582	448	1,308	622	167	37	207
Wisconsin	11,570	2,351	6,101	2,014	977	127	953
New England—Total	34,175	8,565	14,413	5,685	4,402	910	2,768
Connecticut	9,204	2,133	3,511	1,579	1,747	234	750
Maine	3,917	909	1,816	809	337	46	294
Massachusetts	12,813	3,537	5,745	2,040	1,098	393	1,021
New Hampshire	4,729	1,100	1,754	853	889	133	419
Rhode Island	1,671	422	762	291	150	46	123
Vermont	1,841	464	825	313	181	56	161

TABLE 7.4 (continued)
ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1987

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Northwest Mountain—Total	65,664	13,138	28,745	13,225	6,696	1,656	5,980
Colorado	18,202	4,262	6,622	3,417	3,100	801	1,904
Idaho	4,150	660	2,076	983	355	76	366
Montana	4,063	687	2,101	934	296	45	371
Oregon	9,801	1,758	5,715	1,989	622	217	802
Utah	5,610	1,252	2,513	982	703	160	457
Washington	21,686	4,114	9,069	4,504	3,469	510	1,906
Wyoming	2,152	405	1,149	416	153	29	174
Southern—Total	116,661	24,634	45,591	25,634	17,764	3,038	10,097
Alabama	9,271	1,824	3,539	2,360	659	889	955
Florida	45,095	8,983	17,691	10,445	7,311	765	3,871
Georgia	18,047	3,620	6,361	3,751	4,006	900	1,422
Kentucky	5,848	1,412	2,561	1,007	695	173	518
Mississippi	4,789	1,031	1,900	1,425	348	85	363
North Carolina	14,784	3,573	6,032	2,855	1,910	414	1,199
South Carolina	6,916	1,634	2,633	1,613	690	166	597
Tennessee	11,911	2,657	4,674	2,178	2,145	257	1,172
Southwest—Total	85,537	16,719	36,131	18,958	11,800	1,925	7,667
Arkansas	6,266	1,370	2,817	1,584	413	82	529
Louisiana	8,694	1,699	3,501	2,323	876	795	777
New Mexico	5,233	1,139	2,276	1,162	447	209	429
Oklahoma	12,004	2,508	5,927	2,504	882	183	957
Texas	53,340	10,003	21,610	11,385	9,182	1,160	4,975
Western-Pacific—Total	124,484	24,720	55,220	25,253	15,445	3,846	10,087
Arizona	15,445	3,194	6,661	3,209	1,869	532	1,408
California	100,102	19,662	45,541	20,043	11,916	2,960	7,870
Hawaii	3,373	842	834	803	664	230	271
Nevada	5,564	1,022	2,184	1,198	1,016	164	538
Outside U.S.—Total ^{4/}	18,886	3,185	3,216	5,716	6,265	504	893
Other U.S. Areas	1,935	581	648	336	331	39	0
American Samoa	10	1	2	1	6	0	0
Canal Zone	2	1	0	1	0	0	0
Guam	102	20	22	19	40	1	0
Puerto Rico	1,493	495	506	236	223	33	0
Virgin Island	325	63	118	78	61	5	0
Wake Island	3	1	0	1	1	0	0

1/ Includes Outside U.S.

2/ Includes helicopter, glider, and lighter-than-air.

3/ Not included in total.

4/ Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 7.5

ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1987

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Total 1/	<u>42,578</u>	<u>18,367</u>	<u>17,349</u>	<u>4,208</u>	<u>1,538</u>	<u>1,116</u>	<u>2,909</u>
United States—Total	<u>42,063</u>	<u>16,144</u>	<u>17,195</u>	<u>4,119</u>	<u>1,510</u>	<u>1,095</u>	<u>2,869</u>
Alaskan Region—Total	<u>863</u>	<u>365</u>	<u>400</u>	<u>78</u>	<u>14</u>	<u>6</u>	<u>37</u>
Central—Total	<u>1,906</u>	<u>777</u>	<u>880</u>	<u>167</u>	<u>50</u>	<u>32</u>	<u>112</u>
Iowa	378	149	184	35	7	3	20
Kansas	554	206	275	49	14	10	34
Missouri	710	315	298	61	24	12	43
Nebraska	264	107	123	22	5	7	15
Eastern—Total	<u>5,796</u>	<u>2,621</u>	<u>2,168</u>	<u>610</u>	<u>186</u>	<u>211</u>	<u>428</u>
Delaware	93	46	31	9	6	1	7
District of Columbia	75	29	35	6	4	1	4
Maryland	719	291	302	76	29	21	48
New Jersey	897	394	333	101	31	38	66
New York	1,570	709	572	169	40	80	125
Pennsylvania	1,391	651	514	146	38	42	99
Virginia	933	433	340	97	37	26	76
West Virginia	118	68	41	6	1	2	3
Great Lakes—Total	<u>6,848</u>	<u>2,882</u>	<u>2,888</u>	<u>719</u>	<u>235</u>	<u>124</u>	<u>514</u>
Illinois	1,670	693	718	167	70	22	123
Indiana	677	288	274	81	22	12	53
Michigan	1,201	520	481	123	35	42	94
Minnesota	913	361	399	98	43	12	65
North Dakota	177	66	77	33	0	1	14
Ohio	1,446	647	577	145	46	31	110
South Dakota	115	51	50	9	4	1	6
Wisconsin	649	256	312	63	15	3	49
New England—Total	<u>2,392</u>	<u>1,116</u>	<u>910</u>	<u>204</u>	<u>92</u>	<u>70</u>	<u>162</u>
Connecticut	596	275	210	53	38	20	41
Maine	224	106	94	15	8	1	16
Massachusetts	969	474	366	80	24	25	55
New Hampshire	345	158	117	39	16	15	31
Rhode Island	127	48	66	8	2	3	8
Vermont	131	55	57	9	4	6	11

TABLE 7.5 (continued)
ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1967

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Northwest Mountain—Total	4,464	1,910	1,841	429	154	130	303
Colorado	1,329	627	448	133	57	64	111
Idaho	257	98	122	28	5	4	18
Montana	205	88	96	18	3	0	15
Oregon	722	277	353	60	14	18	38
Utah	287	135	108	19	14	11	15
Washington	1,531	628	651	159	60	33	102
Wyoming	133	57	63	12	1	0	4
Southern—Total	6,249	2,905	2,299	609	298	138	416
Alabama	378	167	158	21	8	24	20
Florida	2,707	1,189	1,056	302	111	49	192
Georgia	861	430	304	68	47	12	46
Kentucky	317	158	108	27	20	4	25
Mississippi	215	102	83	22	5	3	12
North Carolina	770	369	266	70	43	22	56
South Carolina	349	183	111	35	12	8	28
Tennessee	652	307	213	64	52	16	39
Southwest—Total	4,689	2,075	1,925	417	156	116	302
Arkansas	304	158	112	31	3	0	22
Louisiana	377	177	137	44	10	9	34
New Mexico	415	177	154	32	14	38	25
Oklahoma	724	314	319	62	21	8	51
Texas	2,869	1,249	1,203	248	108	61	170
Western-Pacific—Total	8,856	3,493	3,884	886	325	268	593
Arizona	1,151	443	503	117	40	48	71
California	7,088	2,778	3,158	702	255	195	477
Hawaii	245	112	70	29	18	16	19
Nevada	372	160	153	38	12	9	26
Outside U.S.—Total ^{4/}	515	223	154	89	28	21	40
Other U.S. Areas	69	35	19	7	5	3	0
Guam	7	5	1	1	0	0	0
Puerto Rico	39	22	9	3	3	2	0
Virgin Island	23	8	9	3	2	1	0

1/ Includes Outside U.S.

2/ Includes helicopter, glider, and lighter-than-air.

3/ Not included in total.

4/ Other U.S. Areas are included in Outside U.S. Total.

TABLE 7.6

ESTIMATED ACTIVE HELICOPTER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1987

Class of Certificates	Number of Certificates Held
Total	<u>31,513</u>
Private Helicopter	1,019
Private Gyroplane, Private Airplane	29
Private Helicopter, Private Airplane	1,316
Private Helicopter, Private Airplane, Private Glider	55
Private Airplane, Commercial Gyroplane, Commercial Helicopter	2
Private Airplane, Private Glider, Commercial Helicopter	37
Private Gyroplane	10
Private Airplane, Commercial Glider, Commercial Helicopter	12
Commercial Helicopter	7,228
Commercial Helicopter, Private Airplane	3,904
Commercial Airplane, Commercial Helicopter	14,778
Commercial Airplane, Private Helicopter	274
Commercial Airplane, Private Glider, Commercial Helicopter	152
Commercial Airplane, Commercial Glider, Commercial Helicopter	587
Commercial Helicopter, Private Glider	5
Commercial Helicopter, Commercial Glider	5
Commercial Gyroplane, Commercial Airplane	24
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	20
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter Commercial Glider	10
Commercial Helicopter, Commercial Gyroplane	1
Commercial Airplane, Commercial Glider, Private Helicopter	18
Airline Transport Helicopter	433
Airline Transport Airplane, Airline Transport Helicopter	1,593

TABLE 7.7
ESTIMATED ACTIVE GLIDER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1987

Class of Certificates	Number of Certificates Held
Total	<u>19,530</u>
Private Glider	6,734
Private Airplane, Private Glider	4,105
Private Airplane, Commercial Glider	795
Private Airplane, Private Glider, Private Helicopter	55
Private Airplane, Private Glider, Commercial Helicopter	37
Private Airplane, Commercial Glider, Commercial Helicopter	12
Private Glider, Commercial Airplane	2,070
Private Glider, Commercial Airplane, Commercial Helicopter	152
Private Glider, Commercial Helicopter	5
Commercial Glider	1,167
Commercial Airplane, Commercial Glider	3,777
Commercial Airplane, Commercial Glider, Private Helicopter	18
Commercial Airplane, Commercial Glider, Commercial Helicopter	587
Commercial Helicopter, Commercial Glider	5
Commercial Airplane, Commercial Gyroplane, Commercial Glider, Commercial helicopter	10
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1

TABLE 7.8
ESTIMATED ACTIVE HELICOPTER AND GLIDER PILOTS
DECEMBER 31, 1983-87

Calendar Year	Total Helicopter Pilots ^{1/}		Total Glider Pilots ^{2/}	
	Number	Percent Change	Number	Percent Change
1987	31,513	-1	19,530	-6
1986	31,697	+2	20,355	
1985	31,206	+2	20,308	-2
1984	30,507	+1	20,733	+2
1983	30,090	+1	20,395	+3

1/ Includes pilots with ratings to fly helicopters only.

2/ Includes pilots with ratings to fly gliders only.

TABLE 7.9
ESTIMATED TOTAL PILOTS AND INSTRUMENT RATED PILOTS
DECEMBER 31, 1983-87

Calendar Year	Total Pilots ^{1/}	Instrument Rated Pilots	
		Number	Percent of Total
1987	553,637	266,122	48
1986	558,845	262,388	47
1985	562,888	258,559	46
1984	572,295	256,584	45
1983	570,807	254,271	45

1/ Excludes student pilots.

TABLE 7.10
ESTIMATED ACTIVE PILOT CERTIFICATES HELD
BY CATEGORY AND AGE GROUP OF HOLDER
1987, 1986, 1983

Age Group	Type of Pilot Certificates														
	Total Active Pilots			Student			Private			Commercial			Airline Transport		
	1987	1986	1983	1987	1986	1983	1987	1986	1983	1987	1986	1983	1987	1986	1983
Total	699,653	709,118	718,004	146,016	150,273	147,197	300,949	305,736	318,643	143,645	147,798	159,495	91,287	87,186	75,938
14-15	264	252	280	264	252	280	0	0	0	0	0	0	0	0	0
16-19	19,752	18,135	19,595	15,542	14,652	14,188	3,854	3,222	4,959	215	114	267	0	0	0
20-24	56,575	58,029	70,679	26,443	27,477	29,759	20,522	21,096	28,039	7,791	7,600	10,806	453	413	622
25-29	86,336	89,246	97,060	27,617	26,885	29,019	32,056	33,569	40,229	16,999	17,226	18,640	6,436	6,306	6,036
30-34	99,311	102,263	104,166	23,762	25,066	24,195	42,746	44,654	46,459	16,497	16,769	16,585	13,117	12,438	11,577
35-39	99,686	105,580	107,927	18,413	19,531	18,089	44,903	46,367	45,670	17,514	20,169	26,219	15,614	15,933	14,628
40-44	97,082	96,586	89,756	13,437	13,606	11,857	41,570	41,426	39,859	22,637	23,661	23,913	16,792	15,437	12,494
45-49	75,194	73,040	71,234	8,251	8,234	7,819	33,189	32,152	32,483	16,146	18,000	18,684	14,342	13,409	11,221
50-54	57,844	59,077	61,035	5,214	5,438	5,718	26,151	27,064	30,941	14,349	14,947	15,065	11,335	10,819	8,479
55-59	47,529	48,211	46,738	3,621	3,685	3,541	24,862	26,539	26,481	11,140	10,816	10,825	7,184	6,398	5,175
60 and over	60,080	58,699	49,534	3,452	3,427	2,732	31,094	29,645	23,523	16,357	18,496	16,492	6,014	6,031	5,704

Age Group	Type of Pilot Certificates											
	Helicopter (Only)			Glider (Only) 1/		Lighter-than-air 1/	Flight Instructor 2/					
	1987	1986	1983	1987	1986	1983	1987	1986	1983			
Total	£,702	8,581	7,237	7,901	8,411	8,157	1,153	1,133	1,337	60,316	57,355	62,201
14-15	0	0	0	0	0	0	0	0	0	0	0	0
16-19	10	23	11	118	105	152	13	18	18	91	46	108
20-24	891	889	811	428	516	551	47	37	91	4,349	4,033	5,533
25-29	2,416	2,379	1,891	678	741	1,043	132	138	200	7,927	7,700	9,511
30-34	1,709	1,672	1,633	1,237	1,397	1,373	243	247	344	£,518	£,301	9,612
35-39	1,575	1,779	1,732	1,363	1,495	1,260	304	306	329	£,734	£,978	10,642
40-44	1,322	1,118	646	1,112	1,157	1,833	212	199	152	5,543	5,633	8,681
45-49	441	418	296	732	737	647	93	90	84	6,895	6,275	6,221
50-54	198	173	125	549	582	632	46	54	75	5,195	4,984	4,831
55-59	86	81	63	596	665	632	40	27	21	3,968	3,469	3,272
60 and over	54	49	27	1,086	1,034	1,034	21	17	23	5,296	4,934	4,390

1/ Glider and lighter-than-air pilots are not required to have a medical examination; however, totals above represent pilots who received a medical examination.

2/ Not included in total active pilots.

TABLE 7.11
AVERAGE AGE OF ACTIVE PILOTS BY CATEGORY
DECEMBER 31, 1978 - 1987

YEAR	TOTAL ^{1/}	STUDENT	PRIVATE	COMMERCIAL	AIRLINE TRANSPORT
1978	37.1	30.5	38.6	39.9	42.6
1979	37.2	30.5	38.7	40.2	42.1
1980	37.5	30.5	39.0	40.4	41.9
1981	37.8	30.7	39.3	40.7	42.0
1982	38.3	31.2	39.5	41.0	42.3
1983	38.8	31.7	40.0	41.5	42.5
1984	39.2	32.1	40.4	42.0	42.7
1985	39.5	32.4	40.8	42.4	42.8
1986	39.7	32.2	41.1	42.6	43.0
1987	39.9	32.3	41.4	42.7	43.1

^{1/} Includes helicopter (only), glider (only) and lighter than air (only) pilots not shown separately.

TABLE 7.12

ESTIMATED INSTRUMENT RATING HELD BY CLASS OF CERTIFICATES
DECEMBER 31, 1987 AND 1986

Class of Certificates	1987	1986	Percent Change 1987-1986
Total—all groups	<u>266,122</u>	<u>262,388</u>	<u>1</u>
Private Pilots—Total	<u>47,746</u>	<u>45,672</u>	<u>5</u>
Private Airplane (only)	<u>43,685</u>	<u>41,947</u>	<u>5</u>
Private Airplane, Private Glider	983	955	3
Private Airplane, Commercial Glider	102	95	7
Private Airplane, Private Helicopter	332	318	4
Private Airplane, Private Glider, Private Helicopter	25	20	-25
Private Airplane, Commercial Helicopter	2,385	2,302	4
Private Airplane, Private Gyroplane	3	2	50
Private Airplane, Private Glider, Commercial Helicopter	21	20	5
Private Airplane, Commercial Glider, Commercial Helicopter	9	12	25
Private Airplane, Other	1	1	0
Commercial Pilots—Total	<u>121,072</u>	<u>123,559</u>	<u>-2</u>
Commercial Airplane (only)	<u>102,017</u>	<u>103,913</u>	<u>-2</u>
Commercial Airplane, Private Glider	1,756	1,825	-4
Commercial Airplane, Commercial Glider	3,098	3,227	-4
Commercial Airplane, Private Helicopter	234	224	4
Commercial Airplane, Commercial Helicopter	13,250	13,624	-3
Commercial Airplane, Private Glider, Commercial Helicopter	134	143	-6
Commercial Airplane, Commercial Glider, Commercial Helicopter	526	549	-4
Commercial Airplane, Commercial Gyroplane	15	13	15
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	15	16	-6
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	1	0
Commercial Airplane, Commercial Glider, Private Helicopter	16	15	7
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	10	9	11
Airline Transport Pilots—Total	<u>91,287</u>	<u>87,186</u>	<u>5</u>
Airline Transport Airplane	89,694	85,714	5
Airline Transport Airplane, Airline Transport Helicopter	1,593	1,472	8
Rotorcraft Pilots—Total	<u>6,017</u>	<u>5,971</u>	<u>1</u>
Commercial Helicopter	5,927	5,873	1
Airline Transport Helicopter	81	89	9
Rotorcraft Other	9	9	0

TABLE 7.13
ESTIMATED INSTRUMENT RATINGS HELD, BY CLASS OF CERTIFICATES, BY FAA REGION: DECEMBER 31, 1987

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western Pacific	Outside U.S. 2/
Total—all groups	<u>266,122</u>	<u>3,489</u>	<u>12,145</u>	<u>34,659</u>	<u>19,753</u>	<u>12,019</u>	<u>23,677</u>	<u>49,879</u>	<u>34,035</u>	<u>46,138</u>	<u>10,328</u>
Private Pilots—Total	<u>47,746</u>	<u>336</u>	<u>2,607</u>	<u>6,710</u>	<u>9,248</u>	<u>2,330</u>	<u>3,599</u>	<u>7,996</u>	<u>5,591</u>	<u>8,299</u>	<u>298</u>
Private Airplane (only)	<u>43,885</u>	<u>279</u>	<u>2,425</u>	<u>6,126</u>	<u>8,876</u>	<u>2,164</u>	<u>3,276</u>	<u>7,109</u>	<u>5,086</u>	<u>8,269</u>	<u>275</u>
Private Airplane, Private Glider	<u>983</u>	<u>6</u>	<u>32</u>	<u>172</u>	<u>159</u>	<u>60</u>	<u>61</u>	<u>153</u>	<u>91</u>	<u>240</u>	<u>9</u>
Private Airplane, Commercial Glider	<u>102</u>	<u>0</u>	<u>3</u>	<u>18</u>	<u>13</u>	<u>14</u>	<u>13</u>	<u>8</u>	<u>10</u>	<u>23</u>	<u>0</u>
Private Airplane, Private Helicopter	<u>332</u>	<u>1</u>	<u>17</u>	<u>43</u>	<u>44</u>	<u>13</u>	<u>30</u>	<u>64</u>	<u>52</u>	<u>67</u>	<u>1</u>
Private Airplane, Private Glider	<u>25</u>	<u>0</u>	<u>0</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>7</u>	<u>0</u>
Private Airplane, Commercial Helicopter	<u>2,365</u>	<u>49</u>	<u>129</u>	<u>342</u>	<u>250</u>	<u>77</u>	<u>208</u>	<u>652</u>	<u>346</u>	<u>319</u>	<u>13</u>
Private Airplane, Private Gyroplane	<u>3</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>
Private Airplane, Private Glider	<u>21</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>7</u>	<u>6</u>	<u>3</u>	<u>2</u>	<u>0</u>
Commercial Helicopter	<u>9</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>0</u>
Commercial Helicopter, Commercial Glider	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Private Airplane, Other	<u>121,072</u>	<u>2,109</u>	<u>6,025</u>	<u>15,829</u>	<u>18,281</u>	<u>5,075</u>	<u>10,947</u>	<u>22,223</u>	<u>15,806</u>	<u>21,081</u>	<u>3,696</u>
Commercial Pilots—Total	<u>102,017</u>	<u>1,813</u>	<u>5,223</u>	<u>13,075</u>	<u>16,204</u>	<u>4,312</u>	<u>9,096</u>	<u>16,039</u>	<u>13,326</u>	<u>17,503</u>	<u>3,424</u>
Commercial Airplane (only)	<u>1,756</u>	<u>19</u>	<u>74</u>	<u>270</u>	<u>234</u>	<u>69</u>	<u>169</u>	<u>268</u>	<u>186</u>	<u>409</u>	<u>16</u>
Commercial Airplane, Private Glider	<u>3,096</u>	<u>20</u>	<u>126</u>	<u>472</u>	<u>436</u>	<u>178</u>	<u>367</u>	<u>486</u>	<u>342</u>	<u>645</u>	<u>26</u>
Commercial Airplane, Commercial Glider	<u>234</u>	<u>3</u>	<u>10</u>	<u>33</u>	<u>46</u>	<u>6</u>	<u>20</u>	<u>39</u>	<u>26</u>	<u>39</u>	<u>8</u>
Commercial Airplane, Private Helicopter	<u>13,250</u>	<u>243</u>	<u>569</u>	<u>1,868</u>	<u>1,273</u>	<u>474</u>	<u>1,198</u>	<u>3,254</u>	<u>1,854</u>	<u>2,309</u>	<u>208</u>
Commercial Airplane, Private Glider	<u>134</u>	<u>0</u>	<u>3</u>	<u>22</u>	<u>21</u>	<u>6</u>	<u>12</u>	<u>28</u>	<u>10</u>	<u>28</u>	<u>4</u>
Commercial Airplane, Commercial Glider	<u>526</u>	<u>10</u>	<u>19</u>	<u>84</u>	<u>54</u>	<u>26</u>	<u>55</u>	<u>86</u>	<u>55</u>	<u>130</u>	<u>7</u>

TABLE 7.13 (Continued)
ESTIMATED INSTRUMENT RATINGS HELD, BY CLASS OF CERTIFICATES, BY FAA REGION: DECEMBER 31, 1987

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southeast	Western Pacific	Outside U.S. ^{2/}
Commercial Airplane, Commercial Gyroplane	15	0	0	1	2	1	4	1	2	4	0
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	15	1	1	0	5	0	3	1	1	3	0
Commercial Airplane, Commercial Gyroplane	1	0	0	0	0	0	0	0	0	1	0
Commercial Airplane, Commercial Glider	16	0	0	3	4	1	0	0	1	6	1
Commercial Airplane, Commercial Glider, Private Helicopter	16	0	0	1	2	0	1	1	1	4	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	16	0	0	1	2	0	1	1	1	4	0
Airline Transport Pilots—Total	<u>91,287</u>	<u>962</u>	<u>3,226</u>	<u>11,165</u>	<u>11,560</u>	<u>4,402</u>	<u>8,698</u>	<u>17,764</u>	<u>11,800</u>	<u>15,445</u>	<u>6,265</u>
Airline Transport Airplane	89,694	927	3,192	10,890	11,421	4,297	8,569	17,461	11,526	15,192	6,219
Airline Transport Airplane, Airline Transport Helicopter	1,593	35	34	275	139	105	129	303	274	253	46
Rotorcraft Pilots—Total	<u>6,017</u>	<u>82</u>	<u>287</u>	<u>955</u>	<u>564</u>	<u>212</u>	<u>433</u>	<u>1,894</u>	<u>838</u>	<u>683</u>	<u>69</u>
Commercial Helicopter	5,927	80	284	945	552	207	429	1,877	816	674	63
Airline Transport Helicopter Other	81	2	1	9	12	4	4	15	21	7	6
	9	0	2	1	0	1	0	2	1	2	0

^{1/} Includes Outside U.S. total.

^{2/} Outside U.S. includes airmen certificated by FAA who live outside the 50 states or foreign countries.

TABLE 7.14

ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1987 ^{1/}

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Total ^{2/}	<u>427,962</u>	<u>297,178</u>	<u>9,659</u>	<u>60,861</u>	<u>9,491</u>	<u>1,445</u>	<u>49,328</u>
United States—Total	<u>406,079</u>	<u>283,755</u>	<u>9,498</u>	<u>59,371</u>	<u>7,583</u>	<u>1,344</u>	<u>46,528</u>
Alaskan Region—Total	<u>4,427</u>	<u>3,107</u>	<u>149</u>	<u>717</u>	<u>142</u>	<u>4</u>	<u>306</u>
Central—Total	<u>21,403</u>	<u>16,607</u>	<u>420</u>	<u>3,047</u>	<u>145</u>	<u>11</u>	<u>1,173</u>
Iowa	<u>2,684</u>	<u>1,981</u>	<u>85</u>	<u>517</u>	<u>9</u>	<u>0</u>	<u>92</u>
Kansas	<u>5,993</u>	<u>4,630</u>	<u>108</u>	<u>907</u>	<u>38</u>	<u>3</u>	<u>307</u>
Missouri	<u>10,937</u>	<u>8,697</u>	<u>160</u>	<u>1,288</u>	<u>95</u>	<u>3</u>	<u>694</u>
Nebraska	<u>1,789</u>	<u>1,299</u>	<u>67</u>	<u>335</u>	<u>3</u>	<u>5</u>	<u>80</u>
Eastern—Total	<u>61,836</u>	<u>44,337</u>	<u>1,638</u>	<u>8,426</u>	<u>1,931</u>	<u>232</u>	<u>5,272</u>
Delaware	<u>1,029</u>	<u>739</u>	<u>26</u>	<u>146</u>	<u>12</u>	<u>5</u>	<u>101</u>
District of Columbia	<u>338</u>	<u>201</u>	<u>19</u>	<u>82</u>	<u>17</u>	<u>0</u>	<u>19</u>
Maryland	<u>3,959</u>	<u>2,449</u>	<u>138</u>	<u>779</u>	<u>51</u>	<u>14</u>	<u>528</u>
New Jersey	<u>11,015</u>	<u>7,554</u>	<u>236</u>	<u>1,352</u>	<u>394</u>	<u>66</u>	<u>1,413</u>
New York	<u>24,099</u>	<u>18,923</u>	<u>388</u>	<u>2,598</u>	<u>1,077</u>	<u>70</u>	<u>1,043</u>
Pennsylvania	<u>14,096</u>	<u>10,425</u>	<u>362</u>	<u>1,991</u>	<u>236</u>	<u>45</u>	<u>1,037</u>
Virginia	<u>6,370</u>	<u>3,423</u>	<u>422</u>	<u>1,267</u>	<u>140</u>	<u>32</u>	<u>1,086</u>
West Virginia	<u>930</u>	<u>623</u>	<u>47</u>	<u>211</u>	<u>4</u>	<u>0</u>	<u>45</u>
Great Lakes—Total	<u>55,820</u>	<u>38,060</u>	<u>1,219</u>	<u>9,635</u>	<u>879</u>	<u>41</u>	<u>5,986</u>
Illinois	<u>15,558</u>	<u>10,099</u>	<u>261</u>	<u>2,491</u>	<u>304</u>	<u>13</u>	<u>2,370</u>
Indiana	<u>5,451</u>	<u>3,887</u>	<u>188</u>	<u>941</u>	<u>56</u>	<u>5</u>	<u>374</u>
Michigan	<u>9,046</u>	<u>6,339</u>	<u>181</u>	<u>1,818</u>	<u>92</u>	<u>7</u>	<u>609</u>
Minnesota	<u>9,585</u>	<u>6,401</u>	<u>137</u>	<u>1,224</u>	<u>278</u>	<u>4</u>	<u>1,541</u>
North Dakota	<u>852</u>	<u>650</u>	<u>25</u>	<u>142</u>	<u>2</u>	<u>0</u>	<u>33</u>
Ohio	<u>10,268</u>	<u>7,309</u>	<u>258</u>	<u>1,967</u>	<u>97</u>	<u>5</u>	<u>632</u>
South Dakota	<u>886</u>	<u>617</u>	<u>21</u>	<u>196</u>	<u>3</u>	<u>1</u>	<u>48</u>
Wisconsin	<u>4,174</u>	<u>2,758</u>	<u>128</u>	<u>856</u>	<u>47</u>	<u>6</u>	<u>379</u>
New England—Total	<u>18,652</u>	<u>12,782</u>	<u>344</u>	<u>2,680</u>	<u>244</u>	<u>163</u>	<u>2,439</u>
Connecticut	<u>5,645</u>	<u>3,604</u>	<u>81</u>	<u>759</u>	<u>76</u>	<u>109</u>	<u>1,016</u>
Maine	<u>1,328</u>	<u>869</u>	<u>41</u>	<u>242</u>	<u>28</u>	<u>8</u>	<u>140</u>
Massachusetts	<u>8,296</u>	<u>6,464</u>	<u>163</u>	<u>1,046</u>	<u>87</u>	<u>14</u>	<u>522</u>
New Hampshire	<u>1,970</u>	<u>918</u>	<u>31</u>	<u>353</u>	<u>29</u>	<u>24</u>	<u>615</u>
Rhode Island	<u>799</u>	<u>547</u>	<u>18</u>	<u>151</u>	<u>9</u>	<u>2</u>	<u>72</u>
Vermont	<u>614</u>	<u>380</u>	<u>10</u>	<u>129</u>	<u>15</u>	<u>6</u>	<u>74</u>
Northwest—Mountain—Total	<u>35,786</u>	<u>22,802</u>	<u>1,299</u>	<u>5,490</u>	<u>471</u>	<u>147</u>	<u>5,577</u>
Colorado	<u>10,956</u>	<u>6,578</u>	<u>168</u>	<u>1,748</u>	<u>186</u>	<u>29</u>	<u>2,247</u>
Idaho	<u>1,594</u>	<u>1,042</u>	<u>157</u>	<u>294</u>	<u>6</u>	<u>4</u>	<u>91</u>
Montana	<u>1,915</u>	<u>1,175</u>	<u>276</u>	<u>364</u>	<u>3</u>	<u>4</u>	<u>93</u>
Oregon	<u>3,936</u>	<u>2,772</u>	<u>233</u>	<u>644</u>	<u>36</u>	<u>27</u>	<u>224</u>
Utah	<u>2,632</u>	<u>1,694</u>	<u>78</u>	<u>396</u>	<u>13</u>	<u>4</u>	<u>447</u>
Washington	<u>13,822</u>	<u>8,863</u>	<u>355</u>	<u>1,888</u>	<u>216</u>	<u>76</u>	<u>2,424</u>
Wyoming	<u>931</u>	<u>678</u>	<u>32</u>	<u>156</u>	<u>11</u>	<u>3</u>	<u>51</u>

TABLE 7.14 (Continued)

ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1987 ^{1/}

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Southern—Total	<u>72,847</u>	<u>48,420</u>	<u>1,849</u>	<u>10,290</u>	<u>1,688</u>	<u>241</u>	<u>10,359</u>
Alabama	5,507	4,336	133	853	10	7	168
Georgia	14,965	9,485	261	1,483	291	13	3,412
Florida	34,036	23,437	542	4,611	1,027	188	4,231
Kentucky	2,430	1,518	159	438	45	0	270
Mississippi	1,624	1,125	42	346	7	3	101
North Carolina	6,334	3,812	431	1,090	138	17	846
South Carolina	2,365	1,456	94	489	17	5	304
Tennessee	5,586	3,251	167	980	153	8	1,027
Southwest—Total	<u>55,489</u>	<u>39,362</u>	<u>978</u>	<u>8,130</u>	<u>662</u>	<u>87</u>	<u>6,270</u>
Arkansas	2,242	1,570	71	438	15	2	146
Louisiana	4,539	3,365	92	679	37	5	361
New Mexico	2,008	1,342	65	461	21	3	116
Oklahoma	12,415	10,558	163	1,334	29	9	322
Texas	34,285	22,527	587	5,218	560	68	5,325
Western-Pacific—Total	<u>81,819</u>	<u>58,278</u>	<u>1,602</u>	<u>10,956</u>	<u>1,421</u>	<u>418</u>	<u>9,144</u>
Arizona	8,283	5,832	188	1,371	211	22	659
California	68,133	48,974	1,304	8,729	1,043	331	7,752
Hawaii	2,778	1,999	56	340	126	11	246
Nevada	2,625	1,473	54	516	41	54	487
Outside U.S.—Total ^{3/}	<u>19,883</u>	<u>13,423</u>	<u>161</u>	<u>1,490</u>	<u>1,908</u>	<u>101</u>	<u>2,800</u>
Other U.S. Areas—Total	<u>1,516</u>	<u>1,141</u>	<u>34</u>	<u>192</u>	<u>59</u>	<u>0</u>	<u>90</u>
American Samoa	9	5	0	3	0	0	1
Canal Zone	39	16	18	3	2	0	0
Guam	147	79	3	22	7	0	36
Puerto Rico	1,169	929	11	139	47	0	43
Wake Island	9	9	0	0	0	0	0
Virgin Island	143	103	2	25	3	0	10

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers and ground instructors represent total ratings issued to date. These ratings retain their validity.^{2/} Includes Outside U.S.^{3/} Outside U.S. includes Other U.S. Areas outside the 50 states and foreign countries.

TABLE 7.15
ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1987 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Total ^{2/}	<u>7,101</u>	<u>2,237</u>	<u>428</u>	<u>3,232</u>	<u>524</u>	<u>680</u>
United States—Total	<u>7,007</u>	<u>2,224</u>	<u>423</u>	<u>3,162</u>	<u>504</u>	<u>674</u>
Alaskan Region—Total	<u>120</u>	<u>26</u>	<u>11</u>	<u>47</u>	<u>28</u>	<u>8</u>
Central—Total	<u>301</u>	<u>132</u>	<u>17</u>	<u>141</u>	<u>6</u>	<u>5</u>
Iowa	<u>70</u>	<u>36</u>	<u>1</u>	<u>31</u>	<u>2</u>	<u>0</u>
Kansas	<u>96</u>	<u>46</u>	<u>6</u>	<u>43</u>	<u>0</u>	<u>1</u>
Missouri	<u>110</u>	<u>46</u>	<u>7</u>	<u>49</u>	<u>4</u>	<u>4</u>
Nebraska	<u>25</u>	<u>4</u>	<u>3</u>	<u>18</u>	<u>0</u>	<u>0</u>
Eastern—Total	<u>911</u>	<u>205</u>	<u>82</u>	<u>417</u>	<u>130</u>	<u>77</u>
Delaware	<u>20</u>	<u>9</u>	<u>1</u>	<u>8</u>	<u>1</u>	<u>1</u>
District of Columbia	<u>10</u>	<u>0</u>	<u>1</u>	<u>6</u>	<u>1</u>	<u>2</u>
Maryland	<u>92</u>	<u>15</u>	<u>4</u>	<u>49</u>	<u>6</u>	<u>18</u>
New Jersey	<u>125</u>	<u>30</u>	<u>7</u>	<u>47</u>	<u>26</u>	<u>15</u>
New York	<u>318</u>	<u>81</u>	<u>14</u>	<u>137</u>	<u>69</u>	<u>17</u>
Pennsylvania	<u>191</u>	<u>39</u>	<u>23</u>	<u>97</u>	<u>20</u>	<u>12</u>
West Virginia	<u>20</u>	<u>15</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>0</u>
Virginia	<u>135</u>	<u>16</u>	<u>32</u>	<u>69</u>	<u>6</u>	<u>12</u>
Great Lakes—Total	<u>1,173</u>	<u>386</u>	<u>59</u>	<u>550</u>	<u>71</u>	<u>107</u>
Illinois	<u>331</u>	<u>104</u>	<u>14</u>	<u>150</u>	<u>21</u>	<u>42</u>
Indiana	<u>116</u>	<u>20</u>	<u>19</u>	<u>52</u>	<u>8</u>	<u>17</u>
Michigan	<u>203</u>	<u>56</u>	<u>6</u>	<u>115</u>	<u>9</u>	<u>17</u>
Minnesota	<u>144</u>	<u>52</u>	<u>5</u>	<u>46</u>	<u>21</u>	<u>20</u>
North Dakota	<u>10</u>	<u>2</u>	<u>0</u>	<u>6</u>	<u>1</u>	<u>1</u>
Ohio	<u>269</u>	<u>131</u>	<u>11</u>	<u>115</u>	<u>6</u>	<u>6</u>
South Dakota	<u>15</u>	<u>2</u>	<u>0</u>	<u>13</u>	<u>0</u>	<u>0</u>
Wisconsin	<u>85</u>	<u>19</u>	<u>4</u>	<u>53</u>	<u>5</u>	<u>4</u>
New England—Total	<u>317</u>	<u>101</u>	<u>12</u>	<u>156</u>	<u>15</u>	<u>33</u>
Connecticut	<u>114</u>	<u>42</u>	<u>4</u>	<u>42</u>	<u>8</u>	<u>18</u>
Maine	<u>24</u>	<u>4</u>	<u>1</u>	<u>16</u>	<u>2</u>	<u>1</u>
Massachusetts	<u>116</u>	<u>36</u>	<u>5</u>	<u>62</u>	<u>4</u>	<u>9</u>
New Hampshire	<u>41</u>	<u>15</u>	<u>1</u>	<u>20</u>	<u>1</u>	<u>4</u>
Rhode Island	<u>11</u>	<u>2</u>	<u>0</u>	<u>8</u>	<u>0</u>	<u>1</u>
Vermont	<u>11</u>	<u>2</u>	<u>1</u>	<u>8</u>	<u>0</u>	<u>0</u>
Northwest—Mountain—Total	<u>680</u>	<u>230</u>	<u>28</u>	<u>300</u>	<u>28</u>	<u>94</u>
Colorado	<u>226</u>	<u>73</u>	<u>1</u>	<u>92</u>	<u>12</u>	<u>48</u>
Idaho	<u>28</u>	<u>8</u>	<u>2</u>	<u>17</u>	<u>1</u>	<u>0</u>
Montana	<u>30</u>	<u>5</u>	<u>4</u>	<u>20</u>	<u>0</u>	<u>1</u>
Oregon	<u>72</u>	<u>15</u>	<u>9</u>	<u>46</u>	<u>0</u>	<u>2</u>
Utah	<u>46</u>	<u>13</u>	<u>6</u>	<u>21</u>	<u>1</u>	<u>7</u>
Washington	<u>258</u>	<u>111</u>	<u>4</u>	<u>95</u>	<u>12</u>	<u>36</u>
Wyoming	<u>18</u>	<u>5</u>	<u>2</u>	<u>9</u>	<u>2</u>	<u>0</u>

TABLE 7.15 (Continued)
ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1987 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Southern—Total	<u>1,235</u>	<u>306</u>	<u>117</u>	<u>558</u>	<u>104</u>	<u>150</u>
Alabama	126	30	6	86	1	3
Georgia	141	40	7	55	12	27
Florida	505	149	14	222	66	54
Kentucky	76	21	10	30	6	9
Mississippi	23	5	1	17	0	0
North Carolina	159	30	41	67	7	14
South Carolina	52	8	4	30	2	8
Tennessee	153	23	34	51	10	35
Southwest—Total	<u>889</u>	<u>320</u>	<u>47</u>	<u>414</u>	<u>43</u>	<u>65</u>
Arkansas	28	6	0	20	0	2
Louisiana	85	36	2	38	5	4
New Mexico	57	13	3	35	2	4
Oklahoma	169	80	8	73	1	7
Texas	550	185	34	248	35	48
Western-Pacific—Total	<u>1,381</u>	<u>518</u>	<u>50</u>	<u>599</u>	<u>79</u>	<u>135</u>
Arizona	152	45	6	82	9	10
California	1,137	458	42	471	57	109
Hawaii	38	8	2	20	3	5
Nevada	34	7	0	26	0	11
Outside U.S.—Total ^{4/}	<u>94</u>	<u>13</u>	<u>5</u>	<u>50</u>	<u>20</u>	<u>6</u>
Other U.S. Areas—Total	<u>9</u>	<u>5</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>0</u>
Guam	1	1	0	0	0	0
Puerto Rico	5	3	0	2	0	0
Virgin Island	3	1	0	2	0	0

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers, and ground instructors represent total ratings issued to date. These ratings retain their validity.

^{2/} Includes Outside U.S.

^{3/} Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 7.16
PILOT CERTIFICATES ISSUED, BY CATEGORY: CALENDAR YEARS 1983-1987

Category of Certificates	1983		1984		1985		1986		1987	
	Original	Additional	Original	Additional	Original	Additional	Original	Additional	Original	Additional
Pilot—Total	150,419	30,898	141,763	30,469	138,589	26,420	141,625	32,628	148,987	39,990
Student	92,239	0	90,085	0	86,060	0	88,699	0	84,958 (P)	0
Private	41,210	12,721	36,545	11,784	35,402	11,686	34,816	12,672	42,278	16,302
Commercial	8,789	9,513	7,702	6,692	8,404	7,197	8,889	9,241	11,314	11,365
Airline Transport	5,643	8,187	5,099	9,335	6,081	9,192	6,498	10,372	7,678	11,956
Helicopter (only)	1,932	315	1,808	319	2,105	207	2,209	234	2,217	293
Glider (only)	606	162	524	139	537	136	514	109	542	74
Konpilot—Total ^{1/}	15,702	5,420	15,436	4,808	16,432	4,713	16,470	5,010	21,878	5,466
Mechanic	11,676	4,470	10,719	4,042	10,559	3,429	10,998	3,289	15,069	4,195
Parachute Rigger	214	13	149	12	157	9	149	11	194	11
Ground Instructor	1,524	371	1,283	293	1,359	343	1,386	323	1,825	366
Dispatcher	632	1	755	3	622	3	516	1	533	3
Flight Navigator	15	2	14	0	1	0	17	0	4	0
Flight Engineer	1,641	563	2,518	458	3,734	929	3,404	1,386	4,233	911
Flight Instructor Certificates ^{2/}	4,614	7,698	4,075	6,828	4,298	5,921	4,628	5,421	6,327	6,378
Instrument Ratings ^{3/}	0	11,078	0	10,845	0	11,673	0	13,688	0	18,296

(P) Preliminary
^{1/} Revised.

N/A Not available.

Note: Additional ratings are entered on current airman certificates as follows:

Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.
Helicopter pilot—instrument and type ratings.
Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instruction.
Mechanic—airframe and powerplant ratings.
Parachute rigger—senior or master rigger—senior or master rigger ratings.
Ground instructor—ratings for each subject in which the holder is qualified to give instruction.
Air traffic control tower operator—junior/senior ratings for airport where holder may control air traffic.

^{1/} Six month total.

^{2/} Not included in total.

^{3/} Special ratings shown on pilot certificates represented above; not included in total.

TABLE 7.17
PILOT CERTIFICATES ISSUED, BY CATEGORY AND CONDUCTOR: DECEMBER 31, 1987

Category of Certificates	Total Ratings Issued	Original Issuances					Additional Ratings		
		Total	Examiner	Inspector	No Test	Total	Examiner	Inspector	No Test
Total	216,341	170,865	68,501	87,251	15,113	45,476	36,352	2,831	4,293
Pilot—Total	188,977	148,987	52,868	86,586	9,533	39,990	34,153	2,693	3,144
Student	84,958 (P)	84,958 (P)	0	84,958 (P)	0	0	0	0	0
Private	58,580	42,278	37,115	447	4,716	16,302	15,518	88	696
Commercial	22,679	11,314	8,144	68	3,102	11,365	9,492	141	1,732
Airline Transport	19,634	7,678	6,208	1,018	452	11,956	8,890	2,443	623
Helicopter (only)	2,510	2,217	893	69	1,255	293	181	20	92
Glider (only)	616	542	508	26	8	74	72	1	1
Nonpilot—Total	27,364	21,878	15,633	665	5,580	5,486	4,199	138	1,149
Mechanic	19,284	15,089	12,018	35	3,036	4,195	3,938	0	257
Parachute Rigger	205	194	88	17	89	11	7	1	3
Ground Instructor	2,191	1,825	121	2	1,702	366	16	3	347
Dispatcher	536	533	333	90	110	3	2	0	1
Flight Navigator	4	4	0	4	0	0	0	0	0
Flight Engineer	5,144	4,233	3,073	517	643	911	236	134	541
Flight Instructor*	12,705	6,327	6,143	148	36	6,378	6,163	200	15

(P) Preliminary

Note: Excludes Renewals

Additional ratings are entered on current airman certificates as follows:

Private, Commercial, and Airline Transport Pilot—Aircraft Category, Class and Type Instrument Rating.

Helicopter Pilot—Instrument and Type Ratings.

Flight Instructor—Ratings for each aircraft category in which the holder is qualified to instruct, and ratings for instrument flying instruction.

Mechanic—Airframe and Powerplant Ratings.

Parachute Rigger—Senior or Master Rigger Ratings.

Ground Instructor—Ratings for each subject in which the holder is qualified to give ground instruction.

Air Traffic Control Tower Operator—Junior/Senior Ratings for airports where holder may control air traffic.

*Special ratings shown on pilot certificates represented above, not included in total.

TABLE 7.18
INSTRUMENT RATINGS ISSUED: 1987, 1986, 1983

Class of Certificates	1987	1986	1983	Percent Change 1987-1986
Total—All Groups	18,296	13,657	11,078	34
Private Pilots—Total	11,142	8,354	7,034	33
Private Airplane (only)	10,397	7,840	6,549	33
Private Airplane, Private Glider	135	95	92	42
Private Airplane, Commercial Glider	12	1	5	1100
Private Airplane, Private Helicopter	35	29	20	21
Private Airplane, Commercial Helicopter	234	178	149	31
Private Airplane, Private Glider, Private Helicopter	1	0	1	0
Private Airplane, Other	328	211	218	55
Commercial Pilots—Total	5,996	4,153	2,956	44
Commercial Airplane (only)	5,044	3,437	2,376	47
Commercial Airplane, Private Glider	48	31	23	54
Commercial Airplane, Commercial Glider	61	31	36	97
Commercial Airplane, Private Helicopter	14	5	5	180
Commercial Airplane, Commercial Helicopter	814	666	495	22
Commercial Airplane, Private Glider, Commercial Helicopter	7	3	4	133
Commercial Airplane, Commercial Glider, Commercial Helicopter	7	9	14	22
Commercial Airplane, Other	1	1	3	—
Rotorcraft Pilots—Total	1,158	1,150	1,088	1
Commercial Helicopter	1,135	1,145	1,085	-1
Commercial Helicopter, Airline Transport Helicopter	20	0	0	—
Commercial Helicopter, Commercial Glider	1	1	1	—
Commercial Helicopter, Other	2	4	2	-50

Table 7.19

STUDENT CERTIFICATES ISSUED, BY MONTH: 1983 - 1987

Month	1983	1984	1985	1986	1987
Total	93,239	90,167 <u>r/</u>	86,060	88,706	84,958(P)
January	6,511	7,485	6,414	6,641	6,098
February	6,146	6,338	5,233	5,590	6,543
March	7,724	7,086	6,809	6,472	7,125
April	6,737	6,931	7,492	7,488	7,139
May	7,650	7,784	7,749	7,415	6,164
June	9,344	8,533	8,279	8,211	8,491
July	9,253	9,202	9,249	9,648	8,973
August	10,426	9,559	8,892	8,886	8,389
September	9,971	7,781	7,973	8,961	8,094 (P)
October	8,040	8,129	7,892	8,133	7,537 (P)
November	6,500	6,291	5,579	5,809	5,750 (P)
December	4,937	5,048	4,499	5,452	4,655 (P)

(P) Preliminary

r/ Revised

VIII. GENERAL AVIATION AIRCRAFT

General aviation aircraft activity information was obtained using the General Aviation Activity and Avionics Survey, which is mailed to the owners of a sample of registered general aviation aircraft. The sample is a scientifically designed random sample which represents all general aviation aircraft registered in the United States.

The survey collects data relative to flight hours, airframe hours and the avionics equipment on board the aircraft. In addition, the survey collects information about the number of hours flown under instrument flight rules, fuel consumption rates, and the state where the aircraft is based.

Because the estimates are derived from a sample--not the total population of aircraft--a certain amount of sampling error is introduced. The user must consider this error along with the estimate itself when making an inference or drawing any conclusions about the aircraft population. Although the exact value of the sample error is unknown, a quantity known as the standard error is used to approximate it. Using the standard error, one can develop an interval within which the true population estimate will lie with a known probability. The probability that the true value lies within the interval depends on the width of the interval, i.e., the estimate plus or minus 1, 2, or 3 times the standard error. The table below shows selected interval widths and their corresponding confidence.

<u>Width of Interval</u>	<u>Approximate Confidence That Interval Includes true Value</u>
1 standard error	68%
2 standard errors	95%
3 standard errors	99%

For example, if the estimate for the total number of active piston powered rotorcraft were 2,658 and the standard error was 176, then the 95% confidence interval would be $2,658 \pm 2(176)$ or (2306, 3010). One would say that there is a 95% chance that the number of active piston powered rotorcraft lies between 2306 and 3010.

In some tables, the standard error is expressed as a percent. To calculate the standard error, multiply the estimated by the percentage. To derive the 95% confidence interval, proceed as before. For example, if total hours flown were 35,792 thousand hours and the percentage standard error was 3.0%, the 95% confidence interval would be:

$$\begin{aligned} 35,792 &\pm (2 \times 3\% \times 35,792) = \\ 35,792 &\pm 2148 = \\ (33,644: 37,940) \end{aligned}$$

The standard error, percent standard error, or a code for the standard error is shown for each estimate made from the sample in this chapter.

More detailed estimates and more detailed discussion of the survey and its methodology are available in General Aviation Activity and Avionics Survey.

TABLE 8.1

ACTIVE GENERAL AVIATION AIRCRAFT BY AIRCRAFT TYPE AND PRIMARY USE: 1987
(Percent standard error is shown in parenthesis)

Aircraft Type	Total	Executive	Business	Personal	Instruc-tional	Aerial Applica-tion	Aerial Observa-tion	Other Work	Commuter Air Carrier	Air Taxi	Other
Fixed-wing—Total	204,067 (0.5%)	11,116 (3.9%)	39,324 (2.7%)	117,895 (1.12%)	14,831 (5.0%)	5,760 (3.6%)	3,654 (10.4%)	1,125 (18.5%)	1,005 (15.6%)	4,905 (8.1%)	4,446 (8.6%)
Piston—Total	194,455 (0.5%)	4,740 (8.2%)	38,455 (2.7%)	117,712 (1.12%)	14,749 (5.0%)	5,682 (3.1%)	3,594 (10.5%)	1,109 (18.8%)	698 (21.4%)	4,050 (9.4%)	3,666 (9.9%)
One Engine	171,035 (0.6%)	1,448 (16.7%)	29,152 (3.2%)	112,000 (1.12%)	14,032 (5.2%)	5,558 (3.1%)	3,259 (11.4%)	1,032 (19.6%)	311 (29.0%)	1,537 (16.3%)	2,707 (12.2%)
Two Engine	23,307 (1.3%)	3,292 (9.2%)	9,303 (4.7%)	5,706 (6.5%)	713 (20.1%)	78 (46.7%)	336 (23.2%)	77 (*)	387 (30.7%)	2,489 (11.6%)	925 (16.4%)
Other Piston	112 (24.6%)	0 (0.0%)	0 (0.0%)	5 (*)	3 (*)	45 (2.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	23 (45.7%)	35 (31.9%)
Turboprop—Total	5,274 (1.9%)	3,253 (4.5%)	504 (18.8%)	144 (40.9%)	57 (*)	77 (4.4%)	55 (44.3%)	14 (*)	301 (15.2%)	485 (18.2%)	384 (21.0%)
Two Engine	5,060 (1.9%)	3,247 (4.5%)	504 (18.8%)	142 (41.2%)	57 (*)	1 (*)	27 (44.2%)	14 (*)	287 (14.0%)	446 (19.5%)	335 (23.0%)
Other Turboprop	214 (9.0%)	6 (*)	0 (0.0%)	2 (*)	0 (0.0%)	76 (0.0%)	28 (0.0%)	0 (0.0%)	14 (0.0%)	39 (36.0%)	49 (46.7%)
Turbojet—Total	4,338 (1.5%)	3,123 (3.8%)	365 (21.5%)	39 (43.1%)	26 (*)	0 (0.0%)	5 (*)	1 (*)	6 (*)	375 (19.7%)	398 (18.6%)
Two Engine	3,900 (1.6%)	2,918 (4.0%)	324 (23.8%)	9 (*)	18 (*)	0 (0.0%)	5 (*)	0 (0.0%)	6 (*)	375 (19.7%)	246 (29.0%)
Other Turbojet	438 (5.1%)	205 (10.7%)	42 (35.4%)	30 (29.7%)	8 (*)	0 (0.0%)	0 (0.0%)	1 (*)	0 (0.0%)	0 (0.0%)	152 (13.1%)
Rotorcraft—Total	6,333 (3.2%)	740 (17.4%)	498 (20.2%)	835 (13.3%)	314 (21.4%)	756 (16.4%)	847 (18.2%)	221 (24.5%)	9 (*)	1,319 (14.2%)	793 (16.3%)
Piston	2,813 (5.0%)	17 (*)	273 (16.9%)	631 (10.7%)	296 (22.3%)	523 (15.9%)	489 (17.5%)	137 (31.5%)	0 (0.0%)	23 (*)	424 (19.0%)
Turbine	3,520 (4.2%)	724 (17.8%)	225 (39.6%)	203 (43.3%)	18 (*)	233 (39.7%)	358 (35.7%)	84 (40.6%)	9 (*)	1,296 (14.3%)	369 (27.4%)
Other—Total	6,783 (3.4%)	104 (*)	121 (4.0%)	4,758 (4.0%)	582 (16.3%)	0 (0.0%)	357 (25.0%)	232 (30.5%)	0 (0.0%)	0 (0.0%)	630 (21.7%)
Total All Aircraft	217,183 (0.5%)	11,960 (3.8%)	39,943 (2.6%)	123,487 (1.0%)	15,727 (4.8%)	6,516 (3.3%)	4,858 (8.6%)	1,577 (14.4%)	1,014 (15.5%)	6,228 (7.1%)	5,873 (7.2%)

NOTE: Columns may not add to totals due to rounding and estimation procedures.

* Indicates a standard error greater than 50.0%.

TABLE 8.2
ACTIVE GENERAL AVIATION AIRCRAFT BY AIRCRAFT TYPE
1980 - 1987
(Standard error is shown in parenthesis)

	1987	1986	1985	1984	1983	1982	1981	1980
Fixed-Wing—Total	204,067 (1,062)	206,096 (1,112)	197,924 (1,154)	207,571 (994)	200,831 (1,306)	198,377 (1,199)	201,201 (1,045)	200,097 (923)
Piston—Total	194,455 (1,055)	195,646 (1,102)	188,191 (1,146)	197,442 (990)	191,480 (1,296)	189,195 (1,192)	193,370 (1,042)	193,014 (921)
One Engine	171,635 (1,011)	171,777 (1,036)	164,385 (1,091)	171,922 (942)	166,247 (1,248)	164,173 (1,140)	167,898 (995)	168,435 (874)
Two Engine	23,307 (303)	23,721 (372)	23,659 (349)	25,258 (301)	24,910 (349)	24,882 (346)	25,356 (306)	24,366 (290)
Other Piston	112 (28)	148 (36)	148 (31)	262 (35)	143 (14)	140 (24)	114 (29)	212 (17)
Turboprop—Total	5,276 (99)	5,964 (116)	5,407 (111)	5,809 (58)	5,453 (95)	5,186 (60)	4,660 (49)	4,090 (46)
Two Engine	5,060 (97)	5,779 (112)	5,240 (110)	5,633 (55)	5,311 (87)	5,037 (53)	4,525 (49)	3,966 (45)
Other Turboprop	214 (19)	185 (36)	167 (13)	176 (15)	142 (38)	145 (28)	134 (5)	123 (10)
Turbojet—Total	4,338 (67)	4,480 (97)	4,375 (74)	4,320 (67)	3,898 (130)	3,996 (112)	3,171 (72)	2,992 (40)
Two Engine	3,900 (63)	4,037 (64)	3,914 (67)	3,780 (50)	3,447 (92)	3,309 (84)	2,808 (68)	2,551 (37)
Other Turbojet	438 (22)	444 (72)	460 (33)	540 (145)	451 (91)	687 (73)	362 (23)	441 (13)
Rotorcraft—Total	6,333 (203)	6,943 (215)	6,418 (256)	7,096 (218)	6,540 (245)	6,169 (226)	6,974 (189)	6,001 (142)
Piston	2,813 (146)	2,921 (175)	2,877 (201)	2,936 (185)	2,541 (191)	2,419 (178)	3,256 (173)	2,794 (133)
Turbine	3,526 (147)	4,022 (126)	3,541 (159)	4,160 (115)	3,998 (153)	3,749 (140)	3,724 (76)	3,207 (49)
Other—Total	6,783 (228)	7,010 (211)	6,263 (207)	6,275 (172)	5,923 (207)	5,233 (211)	5,049 (179)	4,945 (142)
Total All Aircraft	217,183 (1,075)	220,044 (1,152)	210,654 (1,200)	220,943 (1,332)	213,203 (1,345)	209,779 (1,238)	213,226 (1,078)	211,025 (945)

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.3

ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLOWN, BY AIRCRAFT TYPE AND PRIMARY USE: 1987
(Percent standard error is shown in parenthesis)

Aircraft Type	Total	Executive	Business	Personal	Instruc-tional	Aerial Appla-c-tion	Aerial obser-va-tion	Other Work	Commuter Air Carrier	Air Taxi	Other
Fixed-Wing—Total	30,744,172 (1.7%)	3,160,638 (4.6%)	5,625,664 (3.9%)	10,505,858 (2.4%)	4,704,571 (6.9%)	1,436,057 (6.0%)	1,028,684 (16.0%)	290,044 (21.7%)	1,353,481 (16.1%)	1,986,871 (9.9%)	652,301 (10.8%)
Fiston—Total	27,039,354 (1.9%)	1,022,086 (9.6%)	5,342,750 (4.0%)	10,484,577 (2.3%)	4,669,747 (7.0%)	1,372,184 (6.2%)	1,012,717 (16.2%)	279,990 (22.2%)	860,441 (22.0%)	1,534,186 (11.9%)	460,670 (13.4%)
One Engine	22,140,932 (2.0%)	278,053 (18.7%)	3,703,437 (4.4%)	9,864,253 (2.4%)	4,517,563 (7.2%)	1,358,270 (6.2%)	940,803 (17.0%)	242,269 (24.3%)	288,040 (28.5%)	590,922 (20.6%)	357,316 (15.5%)
Two Engine	4,883,151 (5.2%)	744,033 (11.3%)	1,639,313 (8.9%)	620,098 (8.1%)	151,892 (21.0%)	7,117 (47.6%)	71,914 (30.8%)	37,721 (57.2%)	571,401 (35.6%)	936,066 (14.4%)	162,655 (27.2%)
Other Piston	15,271 (31.5%)	0 (0.0%)	0 (0.0%)	226 (126.2%)	293 (145.2%)	6,797 (7.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	7,258 (46.4%)	697 (56.4%)
Turboprop—Total	2,177,061 (5.0%)	1,018,539 (6.2%)	144,855 (23.5%)	18,685 (41.2%)	34,132 (76.1%)	63,872 (33.6%)	14,686 (47.2%)	10,048 (79.8%)	488,415 (17.4%)	281,419 (17.9%)	102,411 (24.7%)
Two Engine	1,993,647 (5.0%)	1,017,579 (6.2%)	144,855 (23.5%)	18,378 (41.5%)	34,132 (78.1%)	583 (235.0%)	3,759 (44.5%)	10,048 (79.8%)	456,912 (17.3%)	219,491 (20.3%)	87,909 (27.1%)
Other Turboprop	183,414 (24.7%)	960 (202.8%)	0 (0.0%)	307 (368.3%)	0 (0.0%)	63,289 (33.8%)	10,927 (76.9%)	0 (0.0%)	31,502 (118.2%)	61,928 (36.0%)	14,502 (58.5%)
Turbojet—Total	1,527,760 (3.9%)	1,120,012 (5.3%)	138,060 (25.4%)	2,597 (44.5%)	693 (67.0%)	0 (0.0%)	1,281 (135.2%)	6 (161.6%)	4,625 (222.0%)	171,266 (21.9%)	89,220 (22.5%)
Two Engine	1,420,614 (4.1%)	1,006,442 (5.6%)	118,981 (28.4%)	1,202 (157.2%)	623 (89.6%)	0 (0.0%)	1,281 (135.2%)	0 (0.0%)	4,625 (222.0%)	171,266 (21.9%)	76,193 (32.2%)
Other Turbojet	107,146 (10.6%)	73,569 (12.1%)	19,079 (37.9%)	1,394 (40.9%)	69 (72.3%)	0 (0.0%)	0 (161.6%)	6 (161.6%)	0 (0.0%)	0 (0.0%)	13,027 (24.2%)
Rotorcraft—Total	2,283,126 (7.3%)	230,836 (21.4%)	77,634 (23.2%)	46,714 (17.0%)	128,485 (24.4%)	229,960 (18.0%)	360,348 (24.5%)	70,067 (28.7%)	5,198 (126.5%)	890,131 (19.4%)	243,813 (18.4%)
Piston	651,687 (9.2%)	2,050 (83.4%)	34,779 (30.12%)	30,545 (16.3%)	123,791 (25.2%)	138,599 (16.3%)	186,445 (24.0%)	46,799 (36.9%)	0 (0.0%)	5,311 (82.0%)	89,368 (22.5%)
Turbine	1,631,439 (9.6%)	228,786 (21.9%)	42,855 (38.8%)	16,168 (47.6%)	4,694 (74.2%)	91,361 (42.2%)	173,903 (47.3%)	29,208 (46.6%)	5,198 (126.5%)	884,626 (19.5%)	154,445 (31.6%)
Other—Total	415,888 (5.9%)	11,786 (64.1%)	9,931 (53.2%)	234,032 (7.3%)	71,011 (22.5%)	0 (0.0%)	23,016 (32.2%)	19,342 (32.8%)	0 (0.0%)	0 (0.0%)	46,772 (26.0%)
Total All Aircraft	33,443,186 (1.7%)	3,403,260 (4.5%)	5,713,229 (3.8%)	10,786,604 (2.3%)	4,904,066 (6.7%)	1,666,017 (5.6%)	1,412,047 (13.2%)	379,393 (17.3%)	1,358,679 (16.1%)	2,877,002 (8.8%)	942,886 (8.8%)

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.4
 ACTIVE GENERAL AVIATION AIRCRAFT
 TOTAL HOURS FLOWN, BY AIRCRAFT TYPE
 1980 - 1987
 (Hours in Thousands)
 (Standard Error is shown in parenthesis)

	1987	1986	1985	1984	1983	1982	1981	1980
Fixed-Wing --Total	<u>30,744</u> (530)	<u>31,397</u> (536)	<u>31,495</u> (529)	<u>33,265</u> (692)	<u>32,558</u> (682)	<u>33,728</u> (632)	<u>37,628</u> (635)	<u>38,318</u>
Piston--Total	<u>27,039</u> (515)	<u>26,861</u> (510)	<u>27,793</u> (516)	<u>29,194</u> (526)	<u>28,911</u> (668)	<u>29,950</u> (656)	<u>34,086</u> (625)	<u>34,747</u> (627)
One Engine	22,141 (449)	21,939 (458)	22,851 (475)	23,506 (485)	23,149 (595)	24,259 (602)	27,692 (588)	28,339 (585)
Two Engine	4,883 (252)	4,911 (224)	4,915 (200)	5,585 (201)	5,730 (304)	5,657 (265)	6,369 (210)	6,277 (224)
Other Piston	15 (5)	11 (5)	26 (9)	102 (30)	32 (10)	33 (10)	25 (6)	130 (18)
Turboprop--Total	<u>2,177</u> (109)	<u>2,882</u> (148)	<u>2,080</u> (96)	<u>2,506</u> (117)	<u>2,173</u> (154)	<u>2,168</u> (145)	<u>2,155</u> (82)	<u>2,240</u> (79)
Two Engine	1,994 (106)	2,797 (148)	2,016 (96)	2,452 (116)	2,090 (150)	2,096 (143)	2,092 (82)	2,138 (78)
Other Turboprop	183 (45)	85 (12)	64 (7)	54 (14)	83 (31)	71 (26)	63 (11)	56 (10)
Turbojet--Total	<u>1,528</u> (60)	<u>1,654</u> (78)	<u>1,622</u> (72)	<u>1,566</u> (74)	<u>1,473</u> (97)	<u>1,611</u> (109)	<u>1,387</u> (56)	<u>1,332</u> (59)
Two Engine	1,421 (59)	1,566 (76)	1,461 (70)	1,328 (67)	1,350 (92)	1,347 (98)	1,238 (48)	1,163 (52)
Other Turbojet	107 (11)	98 (19)	161 (17)	237 (33)	124 (31)	264 (46)	149 (16)	169 (27)
Rotorcraft--Total	<u>2,283</u> (168)	<u>2,625</u> (175)	<u>2,155</u> (166)	<u>2,495</u> (138)	<u>2,271</u> (159)	<u>2,350</u> (156)	<u>2,685</u> (185)	<u>2,338</u> (138)
Piston	652 (66)	804 (103)	564 (85)	592 (67)	572 (49)	579 (58)	930 (108)	736 (75)
Turbine	1,631 (157)	1,821 (141)	1,590 (142)	1,903 (121)	1,700 (151)	1,771 (145)	1,754 (150)	1,603 (116)
Other--Total	<u>416</u> (25)	<u>394</u> (30)	<u>414</u> (34)	<u>358</u> (26)	<u>420</u> (49)	<u>379</u> (40)	<u>391</u> (34)	<u>359</u> (21)
Total All Aircraft	<u>33,443</u> (556)	<u>34,416</u> (565)	<u>34,063</u> (556)	<u>36,119</u> (562)	<u>35,249</u> (712)	<u>36,457</u> (701)	<u>40,704</u> (659)	<u>41,016</u> (650)

NOTE: Columns may not add to totals due to rounding and estimation procedures.

TABLE 8.5
ACTIVE GENERAL AVIATION AIRCRAFT
AVERAGE HOURS FLOWN, BY AIRCRAFT TYPE
1980 - 1987
(Standard error is shown in parenthesis)

	1987	1986	1985	1984	1983	1982	1981	1980
Fixed-Wing —Total	145.6 (2.5)	145.1 (2.5)	155.5 (2.6)	156.0 (2.6)	160.9 (3.3)	170.6 (3.4)	184.4 (3.1)	187.7 (3.1)
Piston—Total	136.9 (2.5)	135.4 (2.5)	147.1 (2.6)	147.1 (2.6)	150.6 (3.4)	159.8 (3.4)	175.4 (3.2)	178.2 (3.1)
One Engine	129.4 (2.6)	127.8 (2.6)	139.5 (2.8)	137.7 (2.8)	139.1 (3.5)	149.1 (3.6)	165.8 (3.4)	168.2 (3.4)
Two Engine	202.9 (10.3)	204.4 (9.0)	207.6 (7.9)	218.2 (7.0)	230.5 (11.9)	230.6 (10.6)	251.1 (7.7)	254.8 (8.4)
Other Piston	140.2 (31.8)	111.1 (50.4)	184.2 (49.8)	433.4 (107.4)	240.4 (32.3)	246.8 (39.2)	197.0 (3.5)	625.4 (38.8)
Turboprop—Total	388.9 (18.3)	422.9 (18.9)	362.0 (15.3)	414.2 (18.4)	389.4 (24.7)	396.3 (25.4)	470.1 (17.9)	433.4 (16.1)
Two Engine	374.2 (17.7)	420.6 (19.4)	360.7 (15.8)	416.0 (18.8)	386.3 (25.0)	394.4 (25.9)	469.4 (18.2)	534.8 (16.4)
Other Turboprop	839.9 (205.6)	498.8 (68.8)	396.5 (23.8)	339.3 (58.1)	578.5 (131.2)	473.0 (84.1)	498.8 (92.4)	487.4 (73.1)
Turbojet—Total	356.2 (13.0)	353.8 (16.9)	368.7 (14.8)	353.6 (14.2)	382.2 (22.5)	404.0 (24.9)	436.3 (12.5)	443.6 (16.6)
Two Engine	371.5 (14.3)	385.0 (18.4)	374.6 (16.5)	348.6 (14.2)	391.6 (24.2)	407.0 (27.7)	422.6 (13.6)	456.1 (18.4)
Other Turbojet	229.2 (22.1)	153.8 (43.0)	325.1 (19.0)	392.6 (57.7)	273.7 (40.2)	385.3 (52.1)	376.5 (22.7)	349.9 (29.1)
Rotorcraft—Total	359.3 (25.0)	380.2 (23.8)	336.1 (22.7)	343.6 (18.5)	350.2 (21.9)	383.2 (21.9)	390.8 (26.2)	382.4 (20.7)
Piston	228.9 (17.9)	273.2 (30.2)	191.6 (24.5)	186.8 (18.2)	221.1 (15.0)	236.8 (18.9)	285.3 (29.3)	262.9 (20.9)
Turbine	485.4 (46.0)	459.4 (34.8)	460.3 (36.7)	468.7 (29.8)	431.6 (34.4)	474.2 (33.5)	489.5 (42.6)	497.7 (35.4)
Other—Total	62.0 (3.4)	56.2 (4.2)	67.1 (5.1)	56.5 (3.6)	71.1 (8.0)	72.4 (7.2)	78.4 (6.3)	75.0 (3.9)
Total All Aircraft	148.4 (2.4)	148.9 (2.4)	158.2 (2.5)	158.1 (2.5)	164.0 (3.2)	174.0 (3.3)	188.1 (3.1)	190.5 (3.0)

TABLE 8.6

**ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN
BY FAA REGION AND STATE OF BASED AIRCRAFT
1987**

FAA Region & State	Active Aircraft		Hours Flown	
	Aircraft	Standard Error	Hours (000)	Standard Error (000)
Total	217,183	1,105	33,443	556
Alaskan Region—Total	7,496	485	1,354	119
Central—Total	13,220	724	1,835	129
Iowa	2,910	351	465	70
Kansas	3,827	397	505	65
Missouri	4,358	425	604	72
Nebraska	2,126	297	261	47
Eastern—Total	24,076	983	3,479	168
Delaware	827	185	148	38
District of Columbia	37	35	3	3
Maryland	2,660	336	383	62
New Jersey	3,899	400	585	68
New York	6,431	503	963	89
Pennsylvania	5,970	485	809	75
Virginia	3,205	362	466	60
West Virginia	1,046	218	123	34
Great Lakes—Total	38,622	1,153	5,220	240
Illinois	7,688	559	1,161	148
Indiana	4,098	415	553	68
Michigan	7,160	539	833	74
Minnesota	4,959	447	637	71
North Dakota	1,353	243	200	50
Ohio	7,850	568	1,154	110
South Dakota	1,154	218	107	25
Wisconsin	4,361	423	575	74
New England—Total	9,111	609	1,237	106
Connecticut	2,016	294	334	58
Maine	1,301	233	148	40
Massachusetts	3,413	379	435	54
New Hampshire	1,338	237	177	39
Rhode Island	389	133	80	38
Vermont	654	161	63	19

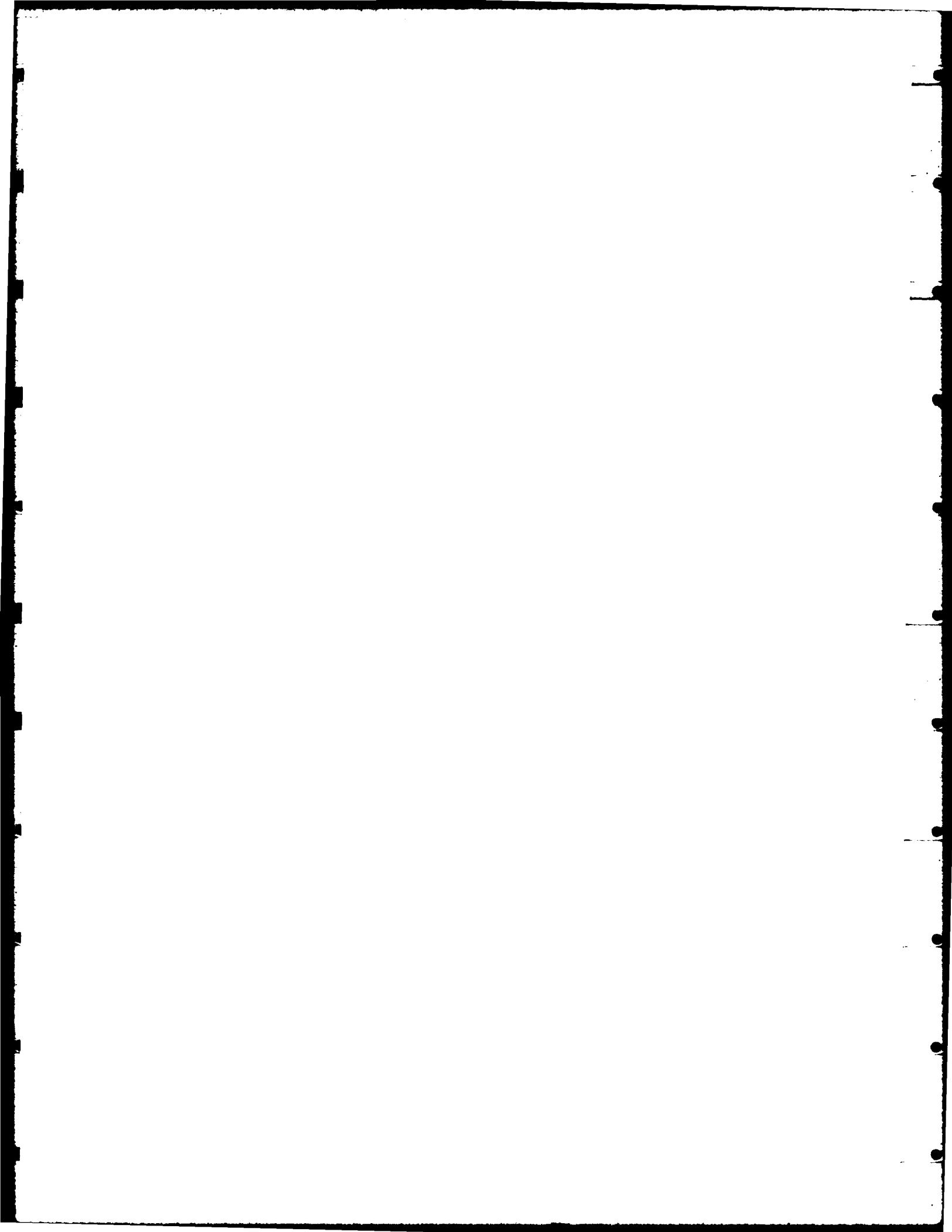
TABLE 8.6 (Continued)

**ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN
BY FAA REGION AND STATE OF BASED AIRCRAFT
1987**

FAA Region & State	Active Aircraft		Hours Flown	
	Aircraft	Standard Error	Hours (000)	Standard Error (000)
Northwest Mountain—Total	<u>21,181</u>	<u>952</u>	<u>3,209</u>	<u>200</u>
Colorado	4,374	426	601	76
Idaho	2,062	294	289	51
Montana	2,154	307	353	63
Oregon	4,254	421	548	59
Utah	1,070	210	496	148
Washington	6,232	502	795	88
Wyoming	1,035	212	125	30
Southern—Total	<u>34,747</u>	<u>1,142</u>	<u>6,005</u>	<u>281</u>
Alabama	2,418	318	394	67
Florida	13,614	727	2,673	213
Georgia	4,789	447	707	80
Kentucky	1,615	265	255	48
Mississippi	2,049	293	365	62
North Carolina	4,944	453	710	87
Puerto Rico	338	121	67	28
South Carolina	1,782	277	341	65
Tennessee	3,062	361	460	62
Southwest—Total	<u>30,357</u>	<u>1,101</u>	<u>5,200</u>	<u>277</u>
Arkansas	2,724	332	508	84
Louisiana	3,327	372	1,067	173
New Mexico	2,121	296	278	56
Oklahoma	3,827	398	488	766
Texas	18,358	836	2,859	180
Western-Pacific—Total	<u>37,884</u>	<u>1,104</u>	<u>5,548</u>	<u>229</u>
Arizona	5,085	460	680	90
California	30,982	1,049	4,606	187
Hawaii	486	140	163	75
Nevada	1,817	272	262	58
Other U. S. Territories	<u>136</u>	<u>75</u>	<u>32</u>	<u>14</u>

NOTE: Column totals may differ from printed totals due to estimation procedures.

N/A Not available



IX. AIRCRAFT ACCIDENTS

The data presented in this chapter were obtain from the National Transportation Safety Board.

The Safety Board's statistics categorize aviation accidents according to the Federal Air Regulations under which the accident flights were made. The groupings are:

Large airlines in scheduled service under Part 121 of the regulations
Commuter carriers in scheduled service under Part 135
"On-demand" air taxis in unscheduled operations under Part 135, and
General aviation--all other civil flying.

See Clossary under "Aircraft Accident: for NTSB definitions for the following terms: "Fatal Injury", "Operator", "Serious Injury", and "Substantial Damage".

More detailed accident data may be obtained from the National Transportation Safety Board.

TABLE 9.1

1987 AIR CARRIER AND GENERAL AVIATION
AIRCRAFT ACCIDENTS AND FATALITIES
(PRELIMINARY DATA)

Air Carrier and General Aviation Operations	Number of Accidents		Number of Fatalities
	Total	Fatal	
Air Carriers			
Air Carriers Operating under 14 CFR 121 ¹			
Scheduled	31	4	231
Nonscheduled	5	1	1
Air Carriers Operating under 14 CFR 135			
Scheduled ²	35	10	58
Nonscheduled ³	98	31	68
General Aviation ⁴	2,420	426	788

¹ Airlines.

² Commuters.

³ On-Demand Air Taxis.

⁴ Includes accidents involving aircraft flown under rules other than 14 CFR 121 and CFR 135.

Source: National Transportation Safety Board.

TABLE 9.2
 FATAL ACCIDENTS, FATALITIES
 AIRLINES: 1967
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 121)
 (PRELIMINARY DATA)

Location	Operator	Date	Service	Aircraft	Fatalities				Total Aboard	Reported Type of Accident
					Total	Passenger	Crew	Others		
SCHEDULED SERVICE										
<u>Total</u>					231	211	16	2	284	
Kansas City, MO	Buffalo Air	4/12	Cargo	DC-7	4	0	4	0	4	Crashed two miles short of runway during instrument approach.
Bozeman, MT	Northwest	8/16	Psgtr	DC-9	156	148	6	2	155	Crashed onto freeway shortly after takeoff.
Denver, CO	Continental	11/15	Psgtr	DC-9	26	25	3	0	82	Crashed while taking off during snow storm.
San Luis Obispo, CA	PSA	12/7	Psgtr	DC-10	38	5	0	43		Suspected suicide/sabotage
UNSCHEDULED SERVICE										
<u>Total</u>					1	1	0	0	135	
Durango, Mex	Skyworld	2/14	Psgtr	DC-7	1	1	0	0	125	Passenger died as result of injuries received during in-flight encounter with turbulence

TABLE 9.3

**AIRCRAFT ACCIDENTS, FATALITIES, AND ACCIDENT RATES
U.S. GENERAL AVIATION FLYING
1978 - 1987**

(ALL OPERATIONS OTHER THAN THOSE OPERATING UNDER 14 CFR 121 OR 14 CFR 135)

Year	Accidents		Total Fatalities	Aircraft Hours Flown (000) [#]	Accident Rate 100,000 Aircraft Hours ^a	
	Total	Fatal			Total	Fatal
1978	4,216	719	1,556	34,887	12.08	2.06
1979	3,818	631	1,221	38,641	9.88	1.63
1980	3,590	618	1,239	36,402	9.86	1.69
1981	3,500	654	1,282	36,803	9.51	1.78
1982	3,233	591	1,187	32,095	10.06	1.84
1983	3,075	555	1,064	31,048	9.90	1.79
1984	3,010	543	1,039	31,510	9.54	1.72
1985	2,741	498 (R)	952 (R)	30,590	8.95 (R)	1.62 (R)
1986 (R)	2,581	469	955	29,318	8.80	1.60
1987 (P)	2,420	426	788	29,320	8.25	1.45

^a Suicide/sabotage accidents are excluded from rates.

(P) Preliminary.
(R) Revised.

Source: National Transportation Safety Board.

#Source of Estimate: Federal Aviation Administration.

TABLE 9.4

**AIRCRAFT ACCIDENTS, FATALITIES AND ACCIDENT RATES
COMMUTER AIR CARRIERS: 1978 - 1987
(U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)*
ALL SCHEDULED SERVICE**

	1978	1979	1980	1981	1982	1983	1984	1985	1986 (R)	1987 (P)
Accidents										
Total	61	52	38	31	26	18	22	21 (R)	15	35
Fatal	14	15	8	9	5	2	7	7	2	10
Fatalities	48	66	37	34	14	11	48	37	4	56
Aircraft Hours Flown (000,000) ¹	1,302	1,170	1,176	1,241	1,200	1,511	1,746	1,737	1,411	1,462
Aircraft Miles Flown (000,000) ¹	226	192	192	193	222	254	291	301	254	263
Departures (000) ¹	1,996	1,384	1,777	1,335	2,027	2,328	2,677	2,561	2,355	2,447
Accident Rate Per 100,000 Hours Flown ²										
Total	4.68	4.44	3.23	2.50	2.00	1.19	1.26	1.21 (R)	1.06	2.39
Fatal	1.08	1.28	0.58	0.73	0.38	0.13	0.40	0.40	0.14	0.58
Accident Rate Per Million Miles Flown ²										
Total	0.27	0.27	0.20	0.16	0.12	0.07	0.08	0.07	0.06	0.13
Fatal	0.06	0.08	0.04	0.05	0.02	0.01	0.02	0.02	0.01	0.04
Accident Rate Per 100,000 Departures ²										
Total	3.06	2.76	2.14	1.59	1.28	0.77	0.82	0.82 (R)	0.64	1.43
Fatal	0.70	0.80	0.45	0.49	0.25	0.09	0.26	0.27	0.08	0.41

* Includes accidents involving all-cargo air carriers when those accidents occurred during scheduled 14 CFR 135 operations. All-cargo air carriers no longer meet the RSPA definition for "Commuters". May also include accidents involving carriers whose FAA operating specifications permit scheduled revenue operations under 14 CFR 135, but who have not received a RSPA fitness determination.

¹ Exposure data estimates from RSPA.

² Rates are based on all accidents including some involving operators not reporting traffic data to the RSPA.

(P) Preliminary.

(R) Revised.

Source: National Transportation Safety Board.

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permit fully legible reproduction

TABLE 9.5

FATAL ACCIDENTS, FATALITIES--ALL SCHEDULED SERVICE
COMMUTER AIR CARRIERS: 1987
(U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)
(PRELIMINARY DATA)

Location	Operator	Date	Ser.	Aircraft	Fatalities				Total Aboard	Reported Type of Accident
					Total	Passenger	Crew	Others		
<u>Total</u>					<u>58</u>	<u>41</u>	<u>14</u>	<u>3</u>	<u>84</u>	
Kearns, UT	Sky West	1/15	Psgt	SA-226T	10	6	2	2	6	Midair collision with General Aviation aircraft.
Detroit, MI	Northwest Airlink	3/4	Psgt	CA-212	9	7	2	0	18	Crashed and burned during landing.
Mayaguez, PR	American Eagle	5/8	Psgt	CA-212	2	0	2	0	6	Crashed during landing.
Atlantic Ocean	Aero Coach	5/27	Psgt	C-402	1	0	1	0	1	Failed to arrive at destination, assumed to have crashed at sea.
Crooked Creek, AK	Hermans Air	8/8	Psgt/Cargo	C-207	1	0	1	0	1	Crashed while maneuvering to delay landing until weather at landing site improved.
Freeport, Bahamas	Caribbean Express	9/26	Psgt	EMB-110	1	0	0	1	10	Camp agent walked into turning propeller.
Homer, AK	Ryan Air Service	11/23	Psgt	BE-1900	18	16	2	0	21	Crashed on landing, 200 yards short of runway.
Chadron, NE	Regional Express	12/22	Psgt	C-402	2	0	2	0	3	Collision with trees during landing approach.
Kenai, AK	Southcentral	12/23	Psgt	FA-31	6	5	1	0	8	Collided with trees on downwind leg of traffic pattern.
Maunaloa, HI	Panorama Air	12/23	Psgt	PA-31	8	7	1	0	8	Crashed at sea.

TABLE 9.6

1987 AIRLINES
 (AIR CARRIERS OPERATING UNDER 14 CFR 121)
 ACCIDENTS, FATALITIES, AND RATES
 (PRELIMINARY DATA)

	Scheduled	Unscheduled
<u>Accidents</u>		
Total	31	5
Fatal	4	1
<u>Fatalities</u>	231	1
<u>Aircraft Hours Flown (000)</u>	9,711	437
<u>Departures (000)</u>	6,980	216
<u>Accident Rate Per 100,000</u>		
<u>Hours Flown</u>		
Total	0.31	1.14
Fatal	0.03	0.23
<u>Accident Rate Per 100,000</u>		
<u>Departures</u>		
Total	0.43	2.32
Fatal	0.04	0.46

Source: National Transportation Safety Board.

Exposure data estimate source: RSPA and FAA.

TABLE 9.7
 ACCIDENTS, FATALITIES AND RATES
 AIRLINES: 1978 - 1987
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 121)
 ALL SCHEDULED SERVICE*

	1978	1979	1980	1981	1982	1983	1984	1985	1986(R)	1987(F)
Accidents										
Total	20	23	15	25	15	22	12	17 (R)	20	31
Fatal	5	4	0	4	3	4	1	4	1	4
Total Fatalities	160	351	0	4	233	15	4	197	1	231
Aircraft Hours Flown (000) ¹	6,032	6,713	6,798	6,571	6,440	6,649	7,438	7,947 (R)	9,357	9,711
Aircraft Miles Flown (000,000) ¹	2,520	2,791	2,816	2,703	2,699	2,809	3,133	3,320 (R)	3,720	3,875
Departures (000) ¹	5,016	5,400	5,353	5,212	4,964	5,034	5,446	5,535 (R)	6,440	6,980
Accident Rate Per 100,000 Hours Flown										
Total	0.33	0.34	0.22	0.38	0.23	0.33	0.16	0.21 (R)	0.21	0.31
Fatal	0.08	0.06	0.00	0.06	0.05	0.06	0.01	0.05	0.01	0.03
Accident Rate Per Million Miles Flown										
Total ²	0.01	0.01	0.01	0.01	0.01	0.01	0.00 ²	0.01	0.01	0.01
Fatal ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accident Rate Per 100,000 Departures										
Total	0.40	0.43	0.26	0.48	0.30	0.44	0.22	0.29 (R)	0.31	0.43
Fatal	0.10	0.07	0.00	0.08	0.06	0.08	0.02	0.07	0.02	0.04

* Includes accidents involving deregulated all-cargo air carriers and commercial operators of large aircraft when those accidents occurred during scheduled 14 CFR 121 operations.

¹ Exposure data estimate source: RSPA.
² Rounded to 0.00.

(R) Revised.
 (P) Preliminary.

NOTE: Sabotage accident occurring 8/11/82 is included in all computations except rates.

TABLE 9.8
 ACCIDENTS, FATALITIES, AND RATES
 ON-DEMAND AIR TAXIS: 1978 - 1987
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)
 NONSCHEDULED OPERATIONS

Year	Number Of Accidents		Total Fatalities	Aircraft Hours Flown ¹ (000)	Accident Rate Per 100,000 Aircraft Hours	
	Total	Fatal			Total Accidents	Fatal Accidents
1978	198	54	155	3,546	5.58	1.52
1979	160	30	77	3,684	4.34	0.81
1980	171	46	105	3,618	4.73	1.27
1981	157	40	94	2,896	5.42	1.38
1982	132	31	72	3,257	4.05	0.95
1983	140	27	62	2,575	5.44	1.05
1984	146	23	52	3,079	4.74	0.75
1985	152	35	76	2,783	5.46	1.26
1986 (R)	117	32	67	2,913	4.02	1.10
1987 (P)	98	31	68	2,900	3.38	1.07

¹ Source of Estimate: FAA.

(P) Preliminary.

(R) Revised.

Source: National Transportation Safety Board.

X. AERONAUTICAL PRODUCTION AND IMPORTS/EXPORTS

The aircraft production information presented in this chapter was obtained from the Bureau of Census: Complete Aircraft Plant Report (Form M37C). The shipment data shows the number of civil aircraft shipped by the United States manufacturers and includes both aircraft shipped within the United States and those exported.

Import and export data were obtained from the Aerospace Industries Association of America, Inc. and were based on Bureau of the Census data from special monthly compilation of Annual Reports 246 and 446, respectively.

TABLE 10.1
TOTAL CIVIL AIRCRAFT PRODUCTION, WEIGHT, AND COST
CALENDAR YEARS 1978 - 1987

Calendar Year	Number of Aircraft	Airframe Weight (000 lbs.)	Value Complete Aircraft (\$000)	Average Complete Aircraft Cost
1978	17,397	52,060	\$8,208,728	\$471,847
1979	17,924	77,327	11,047,147	616,333
1980	11,777	97,068	13,043,076	1,107,504
1981	10,114	89,076	13,195,029	1,304,630
1982	4,053	44,383	8,639,782	2,131,700
1983	2,784	44,936	9,915,761	3,561,696
1984	2,635	33,450	7,911,543	3,002,483
1985	2,457	40,872	10,939,831	4,452,516
1986 (R)	2,888	NA	12,517,992	4,334,485
1987 (P)	2,315	NA	12,295,019	5,311,023

(P) Preliminary.

(R) Revised.

NA No longer available

Source: U.S. Department of Commerce, Bureau of the Census, Industry Division.

TABLE 10.2

NUMBER OF SHIPMENTS OF COMPLETE CIVIL AIRCRAFT
1978 - 1987

Item	1987(P)	1986(R)	1985	1984	1983	1982	1981	1980	1979	1978
Total	2,315	2,888	2,842	3,028	3,217	4,669	11,067	13,130	17,924	18,882
Fixed Wing	1,512	1,858	2,457	2,635	2,784	4,055	10,114	11,777	16,883	18,049
Single Engine	NA	NA	1,551	1,578	1,697	2,546	6,825	8,175	13,044	14,382
Multiengine	NA	NA	906	1,057	1,087	1,509	3,289	3,602	3,839	3,667
Rotorcraft	360	493	385	393	433	614	953	1,353	1,041	833
Other	443	537	NA	NA	NA	NA	NA	NA	NA	NA

NOTE: Other includes balloons, dirigibles, airships, gliders, sailplanes, and aircraft sold in kits (except hang gliders).

(R) Revised.

(P) Preliminary Data.

NA Not available

Source: "Current Industrial Reports: Complete Aircraft and Aircraft Engines," M37G-13; Department of Commerce, Bureau of the Census.

TABLE 10.3

NUMBER OF U.S. IMPORTS OF AEROSPACE PRODUCTS
1978 - 1987

	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Aircraft Used or Rebuilt, Civil	115	141	246	223	181	186	160	100	97	93
Helicopters, Civil	98	87	60	61	100	184	213	177	91	76
Aircraft, Single-Engine, Civil	41	71	46	21	6	23	9	6	3	6
Aircraft, Multiengine, Under 4,400 lbs., Civil	1	18	8	33	18	13	2	6	5	47
Aircraft, Multiengine, 4,400 to 10,000 lbs., Civil	101	58	46	58	52	87	123	119	86	87
Aircraft, Multiengine, 10,000 to 33,000 lbs., Civil	155	150	103	95	93	159	218	156	102	50
Aircraft, Multiengine, Over 33,000 lbs., Civil	22	36	29	12	7	8	8	16	9	5
Balloons, and Airships, Civil	0	0	0	0	0	0	0	0	0	0
Gliders, Civil	117	181	628	448	229	200	119	73	---	---

Source: Aerospace Industries Association, Inc. based on Bureau of Census data from special monthly compilation of Annual Report, FT-410.

TABLE 10.4
NUMBER OF U.S. EXPORTS OF AEROSPACE PRODUCTS
1978 - 1987

	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
Aircraft Used or Rebuilt, Civil	969	494	277	304	224	242	501	494	578	449
Aircraft Helicopter, New, Under 2200 lbs., Civil	129	104	68	155	141	162	268	335	294	243
Aircraft, Helicopter, New, Over 2200 lbs., Civil	152	106	69	78	75	92	185	190	165	125
Aircraft, Single-Engine New Civil	307	220	334	271	279	539	1,800	2,172	2,821	2,640
Aircraft, Multiengine, New, Under 4400 lbs., Civil	51	63	66	53	106	167	371	546	645	455
Aircraft, Multiengine, New, Over 4400 lbs., Under 10,000 lbs., Civil	127	93	65	83	111	209	426	432	360	339
Aircraft, Multiengine, New, Over 10,000 lbs., Under 33,000 lbs., Civil	24	38	19	18	22	25	20	28	52	37
Aircraft, Passenger, New, Over 33,000 lbs., Civil	160	149	140	77	122	110	236	215	172	99
Aircraft, Cargo, New, Over 33,000 lbs., Civil	4	2	6	3	2	6	7	8	13	3
Aircraft Other, New, Over 33,000 lbs., Including Combinations, Civil	6	8	6	3	5	5	12	14	15	9
Aircraft Other, New, Including Balloons, Gliders & Kites, Civil	0	0	0	0	0	0	0	0	0	0

Source: Aerospace Industries Association, Inc. based on Bureau of Census data from special monthly compilation of Annual Report, FT-446.

COMMON ACRONYMS

AAS	Airport Advisory Service
ADF	Automatic Direction Finder
ARS R	Air Route Surveillance Radar
ARTCC	Air Route Traffic Control Center
ASR	Airport Surveillance Radar
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
CAB	Civil Aeronautics Board
DME	Distance Measuring Equipment
DVFR	Defense Visual Flight Rules
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FSS	Flight Service Station
ICAO	International Civil Aviation Organization (Montreal, Canada)
IFR	Instrument Flight Rules
IFSS	International Flight Service Station
ILS	Instrument Landing System
LDA	Landing Directional Aid
LRNAV	Long Range Navigation
MLS	Microwave Landing System
NAS	National Airspace System
NAVAIDS	Navigation Aids
NOTAMS	Notice to Airmen
NTSB	National Transportation Safety Board
RNAV	Area Navigation
RS PA	Research and Special Programs Administration
VFR	Visual Flight Rules
VHR	Very High Frequency
VOR/VORTAC	Very High Frequency Omnidirectional Radio Range

GLOSSARY

Active Aircraft--All legally registered civil aircraft which flew one or more hours.

Aerial Application--See Primary Use.

Aerial Observation--See Primary Use.

Air Carriers--The commercial system of air transportation consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

- o Certificated air carrier--An air carrier holding a Certificate of Public Convenience and Necessity issued by DOT to conduct scheduled services interstate. Nonscheduled or charter operations may also be conducted by these carriers. These carriers operate large aircraft (30 seats or more or a maximum payload capacity of 7,500 pounds or more) in accordance with FAR Part 121.
- o Air taxi--A classification of air carriers which transports in accordance with FAR part 135 persons, property, and mail using small aircraft (under 30 seats or a maximum payload capacity of less than 7,500 pounds).
- o Commuter air carrier--an air taxi operator which performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week, and points between which such flights are performed.
- o Supplemental air carrier (Charter)--An air carrier which holds Certificates of Public Convenience and Necessity issued by the DOT, authorizing performance of passenger and cargo interstate charter services supplementing the scheduled service of the certificated air carriers. The authority of supplemental air carriers to engage in military charters is of an indefinite period. In addition, they can perform on an emergency basis, as may be authorized by the DOT, scheduled operations including the transportation of individually ticketed passengers and individually waybilled cargo.
- o Commercial operator--a person who for compensation or hire engages in the intrastate carriage of aircraft in air commerce of persons or property other than as an air carrier or foreign air carrier.
- o Commercial operator of large aircraft--commercial operator operating aircraft with 30 seats or more or a maximum payload capacity of 7,500 pounds or more.

Aircraft Accident--As defined by the National Transportation Safety Board, it is "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage."

- o Fatal Injury means any injury which results in death within 7 days of the accident.
- o Operator means any person who causes or authorizes the operation of an aircraft, such as the owner, leasee, or bailee of an aircraft.
- o Serious Injury means any injury which (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- o Substantial damage:

(1) Except as described below, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

Exceptions: engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes or wingtips are not considered substantial for the purpose of this part.

Aircraft Contact--Aircraft with which the flight service stations (FSS) have established radio communications contact. One count is made for each enroute, landing, or departing aircraft contacted by an FSS regardless of the number of contacts made with an individual aircraft during the same flight. A flight contacting five FSS's would be counted as five aircraft contacted.

Aircraft Handled--See IFR Aircraft Handled.

Aircraft Type--A term used in this publication in grouping aircraft by basic configuration--fixed-wing, rotorcraft, glider, dirigible, and balloon.

Air Defense Identification Zone--The area of airspace over land or water within which the ready identification, the location, and the control of aircraft are required in the interest of national security.

Airline Transport Pilot--See Pilot.

Airman--A pilot, mechanic, or other licensed aviation technician.

Airman Certificate--A document issued by the Administrator of the Federal Aviation Administration certifying that the holder complies with the regulations governing the capacity in which the certificate authorizes the holder to act as an airman in connection with aircraft.

Airport--An area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

Airport Advisory Service (AAS)--A service provided by flight service stations at airports not served by a control tower. This service consists of providing information to landing and departing aircraft concerning wind direction and velocity, favored runway, altimeter setting, pertinent known traffic, pertinent known field conditions, airport taxi routes and traffic patterns, and authorized instrument approach procedures.

Airport Operation--an aircraft takeoff or landing. There are two types of operations--local and itinerant.

- o local operations are performed by aircraft which:
 - (a) Operate in the local traffic pattern or within sight of the airport.
 - (b) Are known to be departing for, or arriving from, flight in local practice areas within a 20-mile radius of the airport.
 - (c) Execute simulated instrument approaches or low passes at the airport.
- o Itinerant operations are all airport operations other than local operations.

Airport Traffic--Aircraft operating in the air or on an airport surface exclusive of loading ramps and parking areas.

Airport Traffic Control Service--Air traffic control service provided by an airport traffic control tower for aircraft operating on the movement area and in the vicinity of an airport.

Airport Traffic Control Tower (ATCT)--A central operations facility in the terminal air traffic control system, which consist of a tower cab structure, including an associated IFR room if radar equipped, and uses air/ground communications, radar, visual signaling, and other services to provide safe and expeditious movement of terminal air traffic.

Airports Grants-in-Aid Program--A grant of funds by the Secretary of Transportation under the Airport & Airway Improvement Act of 1982 to a sponsor for the accomplishment of one or more projects.

- o Project--Projects (or separate projects submitted together) for the accomplishment of airport development or airport planning, including the combined submission of all projects which are to be undertaken at an airport in a fiscal year.
- o Sponsor--Any private owner of a public-use air OR any public agency (either individually or jointly with other public agencies) that submit to the Secretary of Transportation, in accordance with the Airport & Airway Improvement Act of 1982, an application for financial assistance.
- o Primary Airports--A commercial service airport which is determined to have .01 percent or more of the total number of passengers enplaned annually at all commercial service airports.
- o Commercial Airports--(also known as commercial service airports)--A public airport which is determined to enplane annually 2,500 or more passengers and receive scheduled passenger service of aircraft.
- o Reliever Airports--An airport designated as having the function of relieving congestion at a commercial service airport and providing more general aviation access to the overall community.
- o General Aviation Airports--(also known as public airports)--Any airport which is used or to be used for public purposes, under the control of a public agency, the landing area of which is publicly owned.
- o System Planning--(also known as integrated airport system planning)--The initial, as well as continuing development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable balanced, and integrated system of public-use airports.

Airports of Entry--Aircraft may land at these airports without prior permission to land from U.S. Customs.

Air Route Traffic Control Center (ARTCC)--A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace, and principally during the enroute phase of flight.

Air Taxi--See Air Carrier and Primary Use.

Air Traffic Control (ATC)--A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

Air Traffic Control Facility--A facility which provides air traffic control services located in the U.S., its possessions and territories, and in foreign countries especially established by international agreement.

Air Traffic Hub--Air traffic hubs are not airports; they are the cities or twin cities requiring aviation services. The hubs fall into four classes as determined by each community's percentage of the total enplaned passengers all services and all operations U. S. certificated air carriers in the 50 States, the District of Columbia, and other U.S. areas.

- o Large air traffic hub--a community enplaning 1.00 percent or more of the total enplaned passengers.
- o Medium air traffic hub--a community enplaning from 0.25 to 0.99 percent of the total enplaned passengers.
- o Small air traffic hub--a community enplaning from 0.05 to 0.24 percent of the total enplaned passengers.
- o Nonhub--a community enplaning less than 0.05 percent of the total enplaned passengers.

All-Cargo Carrier (418)--One of a class of air carriers holding an All Cargo Air Service Certificate issued under section 418 of the Federal Aviation Act and certificated in accordance with FAR part 121 to provide domestic air transportation of cargo.

American Flag Carrier--See U.S. Flag Carrier.

Approach Control Facility--A terminal area traffic control facility providing approach control service.

Approach Control Service--Air traffic control service provided by an approach control-facility for arriving and departing aircraft and, on occasion, tower enroute control service.

Business Transportation--See Primary Use.

Carrier Croup--A grouping of certificated air carriers determined by annual operating revenues as shown below:

<u>Carrier Croup</u>	<u>Annual Operating Revenues</u>
Majors	\$1,000,000,000+
Nationals	\$75,000,000 - \$1,000,000,000
Large regionals	\$10,000,000 - \$74,999,999
Medium regionals	0 - \$9,999,999 or that operate aircraft with 60 or less seats or maximum payload capacity of 18,000 lbs.

Certificated Route Air Carrier--See Air Carrier.

Commercial Operator--See Air Carrier.

Commercial Pilot--See Pilot.

Commuter Air Carrier--See Air Carrier.

Defense Visual Flight Rules (DVFR)--A flight within an Air Defense Identification Zone conducted under the visual flight rules in Federal Aviation Regulation, Part 99.

Domestic Operations--In general, operations within and between the 50 States, and the District of Columbia.

Executive Transportation--See Primary Use.

Flight Plan--Specified oral or written information about the intended flight of an aircraft that is filed with air traffic control.

Flight Service Station (FSS)--Air traffic Service facilities within the National Airspace System (NAS) which provide preflight pilot briefings and en route communications with VFR flights, assist lost IFR/VFR aircraft, assist aircraft having emergencies, relay Air Traffic Control clearances, originate, classify, and disseminate Notices to Airmen, broadcast aviation weather and NAS information, receive the close flight plans, monitor radio NAVAIDS, notify search and rescue units of missing VFR aircraft, and operate the national weather teletypewriter system. In addition, at selected locations, FSSs take weather observations, issue airport advisories, administer airmen written examinations, and advise Customs and Immigration of across-the-border flights.

Flight Services--The sum of flight plans originated and pilot briefs, multiplied by two, plus the number of aircraft contacted. See tables 2.6 and 2.14.

Foreign Flag Air Carrier--An air carrier other than a U.S. flag air carrier engaged in international air transportation (see also U.S. Flag Carrier).

Foreign Mail--Mail transported outside the United States by U.S. flag carriers for a foreign government.

General Aviation--That portion of civil aviation which encompasses all facets of aviation except air carriers.

Heliport--An area of land, water, or any structure used or intended to be used for the landing and takeoff of helicopters.

Hub--See Air Traffic Hub.

IFR Aircraft Handled--The number of IFR departures multiplied by two plus the number of IFR overs. This definition assumes that the number of departures (acceptances, extensions, and originations of IFR flight plans) is equal to the number of landings (IFR flight plans closed).

IFR Departure--An IFR departure includes IFR flights originating in center's area, accepted by the center under SOLE EN ROUTE clearance procedures, and extended by the center.

IFR Over--An IFR flight that originates outside the ARTCC area and passes through the area without landing.

Inactive Aircraft--All legally registered civil aircraft which flew zero hours.

Instructional Flying--See Primary Use.

Instrument Approach--An approach to an airport, with intent to land, by an aircraft flying in accordance with an IFR flight plan, when the visibility is less than 3 miles and/or when the ceiling is at or below the minimum initial altitude.

Instrument Flight Rules (IFR)--Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

Instrument Landing System (ILS)--A precision instrument approach system which normally consists of the following electronic and visual aids:

- o Localizer--Provides course guidance to the runway.
- o Glide Slope--Provides vertical guidance during approach.
- o Marker Beacon--Provides aural and/or visual identification of a specific position along an instrument approach landing.

Instrument Operation--An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility or air route traffic control center.

International Flight Service Station (IFSS)--A central operations facility in the flight advisory system, staffed and equipped to control aeronautical point-to-point telecommunications, and air-ground telecommunications with pilots operating over international territory or waters, which provides flight plan following, weather information, search and rescue action, and other flight assistance operations.

International Operations--In general, operations outside the territory of the U.S., including operations between the U.S. and foreign countries, and the U.S. and its territories or possessions. Includes both the combination passenger/cargo carrier and the all-cargo carriers engaged in international and territorial operations.

Itinerant Operation--See Airport Operation.

Jet Route--A route designed to serve aircraft operations from 18,000 feet to 45,000 feet.

Landing Rights Airports--Any aircraft may land at one of these airports after securing prior permission to land from U.S. Customs.

Large Air Traffic Hub--See Air Traffic Hub.

Large Regional Carrier--See Carrier Groups.

Large Certificated Air Carrier--Carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum passenger seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds, or conducting international operations.

Local Operation--See Airport Operation.

Major Carriers--See Carrier Groups.

Medium Air Traffic Hub--See Air Traffic Hub.

Medium Regional Carrier--See Carrier Groups.

Microwave Landing System (MLS)--An instrument landing system operating in the microwave spectrum which provides lateral and vertical guidance to aircraft having compatible avionics equipment.

National Carriers--See Carrier Groups.

Nonhub--See Air Traffic Hub.

Notice to Airmen--A notice containing information concerning the establishment, condition or change in any component of, or hazard in the National Airspace System, the timely knowledge of which is essential to personnel concerned with flight operations.

Other--See Primary Use.

Other Work Use--See Primary Use.

Over--See IFR Over.

Personal Flying--See Primary Use.

Pilot--

- o Student Pilot--A student pilot may not operate an aircraft that is carrying a passenger or that is carrying property for compensation or hire.
- o Private Pilot--A private pilot may not act as a pilot-in-command of aircraft that is carrying passengers for compensation or hire nor act as pilot-in-command in an aircraft that is being operated for compensation or hire (e. g.; one that has been hired to do pipeline patrol but carries no passengers.)

- o Commercial Pilot--A commercial pilot may act as pilot-in-command of an aircraft carrying passengers for compensation or hire and act as pilot-in-command may in an aircraft that is being operated for compensation or hire (e. g.; one that has been hired to do pipeline patrol but carries no passengers.)
- o Airline Transport Pilot--An airline transport pilot may act as a pilot-in-command of an aircraft engaged in air carrier service.

Pilot Briefing--Information furnished a pilot to assist in flight planning. Principal items are weather conditions, notices to airmen, routes, and preparation and handling of the flight plan.

Primary Use--The use category in which an aircraft flew the most hours. The eleven use categories are defined below:

- o Aerial Application--Any use of an aircraft for work purposes which concerns the production of foods, fibers, and health control in which the aircraft is used in lieu of farm implements or ground vehicles for the particular task accomplished. This includes firefighting operations, the distribution of chemicals or seeds in agriculture, reforestation, or insect control.
- o Aerial Observation--Any use of an aircraft for aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, or sightseeing; not included under Part 135.
- o Commuter Air Carrier--An air taxi that performs at least five scheduled round trips per week between two or more points or carries mail.
- o Demand Air Taxi--Use of an aircraft operating under Federal Aviation Regulations, Part 135, passenger and cargo operations, including charter and excluding commuter air carrier.
- o Business Transportation--Use of an aircraft not for compensation or hire by individuals for the purposes of transportation required by business in which they are engaged.
- o Executive/Corporate Transportation--Any use of an aircraft by a corporation, company, or other organization for the purposes of transporting its employees and/or property not for compensation or hire, and employing professional pilots for the operation of the aircraft.
- o Instructional Flying--Any use of an aircraft for the purpose of formal instruction with the flying instructor aboard, or with the maneuvers on the particular flight(s) specified by the flight instructor; excludes proficiency flying.
- o Personal Flying--Any use of an aircraft for personal purposes not associated with a business or profession, and not for hire. This includes maintenance of pilot proficiency.

- o Rental Aircraft--Aircraft owned for the purpose of renting; commercial flying club, leased, and rental aircraft activity.
- o Other Work Use Any aircraft used for construction work (not included under Part 135), helicopter, hoist, towing gliders, or parachuting.
- o Other--Any other use of an aircraft not included above. (Example: experimentation, R&D; testing, demonstration, government).

Private Pilot--See Pilot.

Private-Use Airport: An airport which is not open for the use of the general public.

Privately Owned Airport--An airport which is owned by a private individual or corporation.

Public-Use Airport--An airport open to for public use without prior permission, and without restrictions within the physical capacities of available facilities. May or may not be publicly owned.

Publicly Owned Airport--An airport which is publicly owned and under control of a public agency.

Radar Altimeter--Aircraft instrument that makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the surface.

Rental Aircraft--See Primary Use.

Small Air Traffic Hub--See Air Traffic Hub.

Small Certificated Air Carrier--Carrier holding a certificate issued under section 401 of the Federal Aviation Act of 1958 and operating aircraft designed to have a maximum seating capacity of 60 or less seat or a maximum payload of 18,000 pounds or less.

Stolport--An airport specifically designed for STOL (Short Take-off and Landing) aircraft, separate from conventional airport facilities.

Student Pilot--See Pilot.

Supplemental Air Carrier--See Air Carrier.

Terminal Area--A general term used to describe airspace in which approach control service or airport traffic control service is provided.

Tower--See Airport Traffic Control Tower.

U.S. Flag Carrier or Amercian Flag Carrier--One of a class of air carriers holding a Certificate of Public Convenience and Necessity issued by the DOT, approved by the President, authorizing scheduled operations over specified routes between the United States (and/or its territories) and one or more foreign countries. (See also Foreign Flag Air Carrier.)

VFR Flight--Flight conducted in accordance with Visual Flight Rules.

VHF Communications--Provides radio voice communications between aircraft and ground stations, also between aircraft. Very high Frequency (VHF) is limited in range (line of sight) and usually used for air traffic communications.

VOR--Very high frequency omnidirectional radio range. Used as the basis for navigation in the national Airspace System.

VORTAC--A navigation aid providing azimuth and distance measuring equipment as one site.